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Baltic hillforts: unknown heritage





Kernavė Hillforts (Lithuania).
Photo by Jonas Vitkūnas.

Front cover – Medvėgalis Hillfort (Lithuania).
Photo by Gintautas Zabiela.

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Introduction

Hillforts represent an important part of archaeological legacy in the present and former Baltic lands covering not only Lithuania and Latvia, but also Belarus and parts of Russia, Ukraine, and Poland. Several thousand hillforts witnessing different prehistoric and historic periods were once built in the broad Baltic habitat. They make important elements of the cultural landscape and venues of historic memory. Scientific research of the hillforts allows us broadening our knowledge about the daily life of and wars of our ancestors and opening up both peaceful and bloody pages of the past.

Hillforts are more than just archaeological monuments. In Lithuania and Latvia, they represent an element of historical identity reflected in folklore, poetry, prose, and arts. To emphasise the importance of archaeological cultural monuments for the statehood and the importance of their preservation in the context of historic memory, the Seimas of the Republic of Lithuania proclaimed the year 2017 as the Year of Hillforts.

The level of research of hillforts belonging to different archaeological cultures and located in the habitats of different tribes varies. Hillforts located in the western part of the historic Baltic territories are relatively better researched, though some of the most eastern hillforts of the Dnieper Balts have also enjoyed thorough excavations and scientific publications.

The data on the Baltic hillforts are scattered in countless sources: excavation reports, books, articles, etc. Although they represent legacy of a unified cultural habitat, that is the Baltic world, there have been almost no attempts to present an overall review of the Baltic hillforts.

This study seeks to reveal the development and role of hillforts in the Baltic lands from their appearance till nowadays and to highlight the Baltic hillforts in the general context of European hillforts of prehistoric and historic times using abundant archaeological and historical research data.

The co-authors have developed this study together, yet the tasks were undertaken as follows.



Aukuro Kalnas (Altar Hill) Hillfort and Pajauta Valley in Kernavė (Lithuania).
Photo by Jonas Vitkūnas.

Doc. Dr. Gintautas Zabiela worked on the chapters *The Balts, Archaeological Cultures and Hillforts. What is that?*; *The Beginning of the Baltic Fortification History: the Most Ancient Hillforts*; and *The Hillforts of the Baltic Tribes – Different Histories*. Doc. Dr. Manvydas Vitkūnas wrote *The Most Eastern Bulwarks: the Hillforts of the Dnieper Balts*; *Hillforts in the Middle Ages: Castles in the Defence of the Lithuanian State*; and *The Fate of Hillforts: from Manors to Festival Sites*.

The Baltic hillforts scattered across the territories of several modern states interest scientists and history fans from different countries; therefore, the book is issued in three languages: Lithuanian, English and Russian.

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The Balts, Archaeological Cultures, and Hillforts. What is that?

The Balts... Up till the 19th century, there was no such term. The eastern coast of the Baltic Sea was inhabited by two nations (the Lithuanians and the Latvians), which spoke similar languages very different from all the surrounding nations. The third language of the region – the Prussian that was considered to be similar to the abovementioned on the basis of the surviving vocabulary – was already extinct. Georg Heinrich Ferdinand Nesselmann (1811–1881), a German linguist, was the first to use the newly-created term of the Balts in his book *Die Sprache der alten Preußen (The Language of the Old Prussians)* issued in 1845. Later this term slowly spread both through linguistic and other scientific studies and prevailed eventually entering the common tongue. The etymology of the term is related to the name of the Baltic Sea. G. Nesselmann used it only to identify the group of three above-mentioned related languages spoken on its eastern coast.

Throughout the history of mankind, every ethnical group has been distinguished from the others primarily on the basis of its language, culture, and history. Contemporary researchers of ethno-genesis also look for the signs distinguishing nations elsewhere, for instance, in the anthropology and genetics; nevertheless, the first three features are the most obvious and the best understood.

Uniqueness of an ethnical entity is defined only by the combination of the three. The language, as the most obvious and the most unifying feature of a particular ethnical community, has been in the primary focus of the researchers trying to uncover its past. In the 18th century, after languages were started to be analyzed in detail and the data of such analysis were started to be compared with those of other similar languages, a certain system of the historical language development was established eventually – now it is known as the language genealogical classification or the language family tree. This classification theory was proposed to the world of science in 1853 by the German philologist August Schleicher (1821–1868) in his article *Die ersten Spaltungen des indogermanischen Urvolkes (The First Splits of the Indo-Germanic Proto-nations)*. In his language family tree, the Baltic languages (Lithuanian (*Litauisch*) in the text of the article and Latvian (*Letten*) in the diagram) were separated from the general Germanic-Slavic branch of the Indo-Germanic tree. The modern Indo-European language family tree has more branches but its ‘trunk’ remains the same.

This was the beginning of the scientific understanding of the Balts. Soon, the linguists recognized that the Baltic languages are among the most

ancient Indo-European ones. The term of Indo-Europeans was introduced in 1816 by the German linguist Franz Bopp (1791–1867) in his study *Über das Conjugationssystem der Sanskritsprache in Vergleichung mit jenem der griechischen, lateinischen, persischen und germanischen Sprache* (*On the System of Conjugation in the Sanskrit Compared to the Greek, Latin, Persian, and Germanic Languages*).

Whereas the linguists highlighted the ancient origins of the Balts by the middle of the 19th century, the archaeologists came up to the studies of their most ancient past only half a century later. First of all, such studies required building an array of the primary data on the traces of material culture left by the people of different prehistoric epochs; the data had to be summarized distinguishing groups sharing certain similarities called the archaeological cultures and only afterwards the historical interpretations began based on rather late written records on the Balts. On the wake of the archaeological science, the term of the archaeological culture appeared in Europe in the middle of the 19th century. In March 1869, a short article by Louis Laurent Gabriel de Mortillet (1821–1898) called *Essai d'une classification des cavernes et des stations sous abri, fondée sur les produits de l'industrie humaine* (*The Overview of the Classification of the Caves and Camps in the Grottos with Artefacts of Human Production*)¹ was published, whereby the author divided the Stone Age in France into four epochs according to artefact production technology. In 1846–1863, Johan Georg Ramsauer (1795–1874) researched the Hallstatt Necropolis (Austria) and attributed this culture to the Celts². In 1874,

Bror Emil Hildebrand (1806–1884) described the La Tène Culture (called after the settlement if Switzerland discovered in 1857)³. The year 1861–1865 excavations of Alesia, the Gallic historic city conquered by the Roman Proconsul Gaius Iulius Caesar (102–44 B.C.) in 52 B.C. enabled comparison of the finds to the artefacts of the La Tène and other similar burial monuments. Since then, the archaeological culture term developed in various directions until it gained its final form in the early 20th century⁴.

Adalbert Bezzenberger (1851–1922) was the first to correlate archaeological cultures with ethnical groups in the habitat of the Balts. Since 1891, he was researching archaeological monuments, mostly burial grounds, in the East Prussia and Klaipėda Region (the Memelland of the contemporary German Empire)⁵. By the end of the 19th century, learning of the past of the local inhabitants also followed similar trends in Latvia (the Governorate of Courland and Livonia of the contemporary Russian Empire)⁶.

The concept of the territorial archaeological cultures of the contemporary Russian Empire was considerably advanced by Aleksandr Spitsyn (*Александр Спицын*, 1858–1931). His diagram of prehistoric development developed in the first and second decade of the 20th century was extensively presented in the publication issued in Lithuania a bit later: as for the Iron Age, as much as 13 cultures were distinguished; some of them were related to respective ethnical groups already through their names⁷. In Latvia, the legacy of the Iron Age has been interpreted ethnically since 1920s⁸. Distinguishing the cultures of the Eastern Balts was started in 1930⁵–1940⁵ by Aleksandr

¹ MORTILLET DE, M. C. Essai d'une classification des cavernes et des stations sous abri, fondée sur les produits de l'industrie humaine. *Matériaux pour l'histoire primitive et naturelle de l'homme*. Paris, 1869, p. 172–179; MORTILLET DE, M. C. Essai d'une classification des cavernes et des stations sous abri, fondée sur les produits de l'industrie humaine. *Comptes rendus hebdomadaires des séances de l'Académie des sciences*. Paris, 1869, t. LXVIII, p. 553–555.

² MEGAW V.; MEGAW R. Celts, *Encyclopedia of archaeology. History and discoveries*. Santa Barbara, Benver, Oxford, 2001, t. I, p. 288.

³ GRAN-AYMERICH È. *Les chercheurs du passé 1798–1945*. Paris, 2007, p. 152.

⁴ КЛЕЙН Л. Ц. *История археологической мысли*. Санкт-Петербург, 2011, т. 1, с. 369–370.

⁵ TAMULYNAS L. A. Bezzenbergerio archeologiniai tyrinėjimai Klaipėdos krašte. *Lietuvos archeologija*. Vilnius, 1998, t. 15, p. 257–260.

⁶ BALODIS F. *Latviešu vēsture*. Rīgā, 1938. I sējums, 1. daļa, p. 24.

⁷ СПИЦЫНЪ А. Литовскія древности. *Tauta ir žodis*, Kaunas, 1925, t. III, p. 133–161.

⁸ *Latvijas arhaioloģija*. Rīgā, 1926, p. 52–123.



Constantin von Grewingk



Valentin Sedov

Lyaudanski (Аляксандр Ляуданскі, 1893–1937)⁹. The final correlation between the historical Balts and archaeological cultures was established in 1950s by Marija Gimbutas (*Marija Gimbutienė*, 1921–1994)¹⁰.

The first names of the Baltic tribes (referred to as the Aesti in the sources of the 1st–9th century), specifically those of the Galindians and the Sudovians, were recorded in the written sources of the middle of the 2nd century A.D. In general, the attribution of the archaeological cultures to the Baltic tribes began in the late 19th century, although the first hypotheses (about the differences between the Balts and the Finns) were raised already in 1870 by the Estonian-German researcher Caspar Andreas von Grewingk (1819–1887). The Russian researcher Fyodor Pokrovsky (Фёдор Покровский, 1855–1903) distinguished the Balts from the Slavs in the Iron Age barrow cemeteries based on the burial

styles. Nonetheless, although it was easy to identify the Latvians or Lithuanians or recently assimilated Prussians with the respective archaeological cultures found within their habitats, the ethnical attribution of the ancient cultures found in the lands inhabited by the Slavs since the 2nd half of the 1st millennium A.D. was more complicated. A. Spitsyn was the first to identify features of the Baltic culture there; he did that in the early 20th century. In 1930^s, M. Lyaudanski tended to identify the pre-Slavic hillforts of the upper reaches of the Dnieper as Baltic (Lithuanian)¹¹. Later, it was seconded by other researchers¹². Nowadays, differentiation of the Baltic cultures of the Dnieper area from the others is based on the opinion of a famous Eastern European and Slavic prehistory researcher Valentin Sedov (Валентин Седов, 1924–2004)¹³.

⁹ ЕГОРЕЙЧЕНКО А. Железный век в исследованиях А. Н. Лявданского. *Час, помнікі, людзі*, Менск, 1993, с. 39.

¹⁰ ALSEIKAITĖ-GIMBUTIENĖ M. Kapų tipai Lietuvoje priešistoriniiais laikais. *Gimtasai kraštas*, Šiauliai, 1943, t. 31, p. 27–30; ALSEIKAITĖ-GIMBUTIENĖ M. *Die Bestattung in Litauen in der vorgeschichtlichen Zeit*. Tübingen, 1946, s. 88–111.

¹¹ ЛЯВДАНСКИЙ А. Н. Некоторые данные о городищах Смоленской губернии. *Научные известия Смоленского государственного университета*, Смоленск, 1926, т. 3, часть 3, с. 183–184.

¹² *Археологія Беларусі*, т. 2. Жалезны век і ранняе сярэднявечча. Мінск, 1999, с. 157.

¹³ SEDOV V. *Balti senatnė*. Rīga, 1992, p. 31 5 att., 83 14 att.



Lithuanian–Latvian border mark
at the Užubaliai (Petruki) Hillfort (Latvia), 2004.
Photo by Gintautas Zabiela.

Hillforts are one of the most important and obvious proofs of the distinction of the ancient Balts. They are much more numerous in the Baltic habitat compared to the neighboring regions and this is an important difference most probably determined by the specific living conditions and historical development of these areas. There are about 3.5 thousand hillforts in Lithuania, Latvia (except of its northern part), Belarus, former Prussia (currently, the north-eastern part of Poland and the Kaliningrad Oblast of the Russian Federation), and the western part of the Russian Federation (the regions of Bryansk, Kaluga, Kursk, Oryol, Smolensk, and the neighboring areas)¹⁴. The number is changing as new hillforts are being discovered and the research of the known ones progresses. For instance, over the recent decade 80 unknown hillforts have been discovered in Lithuania and 85 were found in Latvia till the end of the 20th century, although here, thanks to Ernests Brastiņš (1892–1942), the hillforts used to be the best-researched in the region already in the 1st half of the 20th century¹⁵. Previously unknown hillforts are found throughout the entire habitat of

the Balts till nowadays; therefore, their total number may amount to four thousand. Identifying the precise number of hillforts is complicated, because different countries apply different identification criteria. For instance, the Hillfort of Užubaliai (Petruki) located on the Lithuanian-Latvian border is deemed to be a true hillfort in Lithuania¹⁶, yet in Latvia, it is doubted¹⁷. Nevertheless, the most problematic aspect of understanding the Baltic hillforts is the shortage of the research. Although their archaeological excavations began already in the late 19th century, the period of the most intensive interest has passed by now. Most of the hillforts were researched in the second half of the 20th century, and the finds still make the basis for determining various aspects of their development. Interesting discoveries have been made in the beginning of the 21st century, too. Unfortunately, the results of the research often remain unpublished and, therefore, the interested parties often remain unaware of them.

In general, knowing the overall area of the Baltic hillforts, determining their chronology and purpose still remains the major issue unresolved. Over 85 percent of the Baltic hillforts have never been researched; therefore, their external appearance and random finds often are the only clues to the identification of their very approximate dating. However, while hillforts are dated based on their external appearance, only the latest stage of their use can be identified, because hillforts are often damaged or carry traces of fortifications build by the representatives of other cultures (the Teutonic castles were build on the Baltic hillforts in Prussia, whereas the Slavic ones – in Russia and Belarus). Meanwhile, random finds show only a possible period of the specific hillfort use and rather imply its damage than give information about it. Small-scale excavations (up to 25 m²), which became rather widespread recently due to the specifics of the archaeological research funding, are also quite uninformative as a

¹⁴ ZABIELA G. Lietuvos piliakalniai ir pily. *Lietuvos pily ir tvirtovės*, Kaunas, 2001, p. 53.

¹⁵ URTĀNS J. *Latvijas austrumu daļas jaunatklātie pilskalni*. Rīga, 1995, p. 5; URTĀNS J.; ASARIS J. *Latvijas rietumu daļas jaunatklātie pilskalni*. Rīga, 1998, p. 3.

¹⁶ *Lietuvos piliakalniai: atlasas*. Vilnius, 2005, t. II, p. 358–359.

¹⁷ URTĀNS J. *Augšzemes pilskalni*. Rīga, 2006, p. 173–174.

lot depends on the researcher, the timing and the exact spot of the excavations¹⁸. The scientific understanding of the hillforts is better facilitated by the data from the hillforts, which underwent a more extensive research; so, the overview of the Baltic hillforts will be primarily based on these ones.

The Baltic hillforts as enclosed landscape formations with external earth fortifications differ greatly from one another. We can say that there are no two hillforts alike and the differences are caused by the most versatile reasons. However, all the hillforts have common features, too. All of them are outstanding natural landscape formations with fortifications encircling the hilltop. If this feature is absent, a formation is not considered to be a hillfort. For instance, the Western European plains feature two different groups of the objects: the Michelsberg Culture dating to 4300–3500 B.C. left settlement sites fortified with two fosses but these are not hillforts¹⁹; on the other hand, fortified sites with ramparts found on the same territory are recognized as hillforts²⁰. Fortifications of the hillforts include ramparts, fosses, steepened slopes, and natural barriers (i.e., naturally steep slopes). Usually, they were combined with one another. If the features of the chosen site impeded its appropriated fortification, additional enclosed fortifications like fore-works or outer baileys functionally connected to the main stronghold could be formed. Now they are not considered as hillforts, although in some cases, they are still called that (for instance, in Kernavė).

The accumulated research materials reveal that hillforts had many functions. Fortified settlements and locations of former wooden castles are the best researched; hillforts that served as temporary



Site of the Langendorf Castle built at the old Prussian hillfort (Sokolniki, Kaliningrad Oblast, Russian Federation), 2012. Photo by Gintautas Zabiela.

refuges are less explored and the type of hillforts-shrines is still a mystery. Probably, it is all due to the shortcomings of the hillfort research. Not everything can be uncovered by the archaeological methods. The oral tradition – all kinds of tales and legends about hillforts – is poorly explored, too. A new and promising hillfort research trend is assessing their fortifications using methods of the experimental archaeology²¹. Besides that, we often have to deal with unfinished hillforts or hillfort used for a very short period of time, for instance, at the time of a single military encounter, in which traces of any material culture are almost impossible to find.

As a type of ancient fortifications, hillforts were widespread all over Europe and used over different time periods. Their appearances differ mostly due to the specifics of the geographical location and landscape as well as the level of development of the specific prehistoric community. Hillforts originate from Neolithic settlements fortified with fosses and fences. Such settlements occurred in the Southern Europe already in the 6th millennium B.C. (Nea Nikomedeia, Greece)²². The occurrence of

¹⁸ ZABIELA G. Lietuvos piliakalniai: tyrinėjimų aspektas. *Lietuvos archeologija*, Vilnius, 2003, t. 24, p. 50, 3 nuoroda.

¹⁹ PROBST E. *Deutschland in der Steinzeit*. München, 1999, p. 316–317.

²⁰ HOFER N.; KRENN M.; BLESCH Ch. Hausberge und verwandte Wehranlagen. Zum aktuellen Forschungsstand in Niederösterreich. *Beiträge zur Mittelalterarchäologie in Österreich*, Wien, 2007, Band 23, s. 252–253.

²¹ ROBERTSON P. *Iron Age hillfort defences and the tactics of sling warfare*. Oxford, 2016.

²² KOKKINIDOU D.; NIKOLAIDOU M. Neolithic enclosures in Greek Macedonia: violent and non-violent aspects of territorial demarcation. *Ancient warfare*, Stroud, 2009, p. 92–93.



Fore-work of the Narkūnai Hillfort (Lithuania), 2009.
Photo by Gintautas Zabiela.

Dyakov Hillfort (Moscow, Russia), 2012.
Photo by Gintautas Zabiela.



fortifications is undoubtedly related to metal mining, smelting, and trade, which caused social differentiation and rise of military power²³. In the 5th millennium B.C. smelting of copper began followed by gold in the 2nd half of the same millennium, led and silver in the 4th millennium B.C. and tin in the early 3rd millennium B.C.²⁴ Since then, smelting of bronze – an alloy of copper and tin (10/15 percent) – began. The occurrence and proliferation of real hillforts is related to bronze smelting and trade. The ancient fortifications of the Danube-Carpathian region were mostly built at the sites enabling control of the trade routes²⁵. In the early 2nd millennium B.C., hillforts started appearing in the habitat of the Babin-Abashev culture (Southern Russia)²⁶. Fortifications arranged on hilltops or peninsulas of water bodies proliferated in the 2nd half of the Bronze Age (the 2nd half of the 2nd millennium B.C.): They are known in the archaeological cultures of Unetichi, Madar, and Lausitzer (Central Europe) as well as others²⁷. In 1200–800 B.C. hillforts (*Wallburg*) of the Urn Field Culture, which thrived in Austria and the neighboring territories, covered dozens of hectares and were fortified with ramparts and fosses²⁸. In the Iron Age, hillforts turned into huge fortifications in some territories: they could cover hundreds or even thousands hectares²⁹. Next to that, there were territories with small and scattered fortifications. Throughout the entire period of hillfort existence, including the Middle Ages, Norway accounts about

450 of them³⁰ and Estonia – 131³¹. The earliest hillforts of the Dyakov Culture (the upper reaches of the Volga River in the Russian Federation) dating to the 7th–6th century B.C. are few as well.³²

The Baltic hillforts stand out among the other European ones due to their size and abundance. They were rather small, which caused their higher density. In Lithuania, one hillfort accounts for the territory of about 75 km² and there are areas, where hillforts stand in less than one kilometer from one another. Almost without exclusions, the Baltic hillforts were built using only dirt and timber. Stones are found only in early hillforts and mostly in the western part of the habitat. Later, such ramparts were raised up by putting more dirt onto them and stones were used only to reinforce the slopes. Timber was also rarely used to reinforce the ramparts at the Baltic hillforts. Such feature is characteristic only to medieval ones. Sites fully surrounded by natural obstacles were rarely chosen for hillforts. Although many Lithuanian lakes have islands with suitable eminences and dozens of island settlements are known, only a few of them can be identified as hillforts. The areas of the leveled tops of the Baltic hillforts rarely exceed one hectare and most often make only half of that. The tops with regular geometrical form are also found only at medieval hillforts. The sites for hillforts were chosen so that their fortification demanded only minimal adjustment. Artificial mounds are a rarity among the Baltic hillforts.

The Baltic hillforts represent an important element of the prehistoric and even medieval European legacy; however, their wholeness is poorly known not only to our neighbors but also by us. This publication presents the hillfort legacy in the chronological order. We hope that it is going to enhance the understanding of the Baltic hillfort history and its importance.

²³ *Cultural heritage in Slovakia. Archaeological monuments*. Bratislava, 2009, p. 6.

²⁴ ПЕРНИЦКА Э. Распространение металлургии в Старом свете. *Бронзовый век*, Санкт Петербург, 2013, с. 69–73, 77.

²⁵ КРИСТИАНСЕН К. Война в эпоху бронзы. *Бронзовый век*, Санкт Петербург, 2013, с. 197.

²⁶ ПАРЦИНГЕР Г. Особенности культурных взаимосвязей от Волги до Рейна в эпоху бронзы. *Бронзовый век*, Санкт Петербург, 2013, с. 36–37.

²⁷ МОНГАЙТ А. Л. Археология Западной Европы. *Бронзовый и железный века*. Москва, 1974, с. 52, 57, 68.

²⁸ PROBST E. *Deutschland in der Bronzezeit*. Munchen, 1996, p. 386–387.

²⁹ ZABIELA G. Piliakalniai – seniausieji Lietuvos gynybiniai įtvirtinimai. *Lietuvos piliakalniai: atlasas*, Vilnius, 2005, t. I, p. 13.

³⁰ YSTGAARD I. *Organisert voldsbruk og materiell kultur i Midt-Norge ca. 100–900 e. Kr.* Trondheim, 2014, p. 148.

³¹ TÖNISSON E. *Eesti muinaslinnad, Muinasaja teadus*, vol. 20. Tartu–Tallinn, 2008, p. 180 jn. 90.

³² *Дьяковская культура*. Москва, 1974, с. 47, 78, 189–190.



Archaeological cultures of Balts in 1st millennium B.C. and hillforts mentioned in the text:

1 – Barsuki (Vitebsk Oblast, Belarus); 2 – Khalopenichi (Mogilev Oblast, Belarus); 3 – Garoshkav (Gomel Oblast, Belarus); 4 – Kalna-Kivuti (Latvia); 5 – Kublichi (Vitebsk Oblast, Belarus); 6 – Kudlayvka (Chernihiv Oblast, Ukraine); 7 – Narkūnai (Lithuania); 8 – Nevieriškė (Lithuania); 9 – Radovishche (Oryol Oblast, Russian Federation); 10 – Ratyunki (Vitebsk Oblast, Belarus); 11 – Sauginiai (Lithuania); 12 – Vshchizh (Bryansk Oblast, Russian Federation); 13 – Zakhidne Yukhnove (Chernihiv Oblast, Ukraine).

Drawing by Edita Namajūnienė.

The Beginning of the Baltic Fortification History: the Most Ancient Hillforts

The Baltic habitat was rather distant from the bronze smelting locations, which featured civilization advancement. The most ancient and nearest bronze smelting venues were in the Carpathian region (1900 to 1800 B.C.), southern Scandinavia (1800 to 1700 B.C.) and the Volga-Kama basin (2000 to 1700 B.C.).³³ It took some time, until metal artefacts reached the Eastern Baltic. Bronze artefacts started to spread in Lithuania only since 1300 to 1100 B.C.³⁴ Their production began even later and was episodic; therefore, it looks like, next to the external threats, the appearance and development of hillforts in this region were caused not so much by bronze smelting but rather by the attempts and abilities to control the metal trade routes, primarily the Daugava River³⁵.

In the hilly territories between the Daugava and the Neman Rivers, the Brushed Pottery Culture formed in the 2nd half of the Bronze Age, on the edge of the 2nd and the 1st millennium B.C. It was named after the typical hand-made pottery with a

brushed surface. Most probably, irregular brushes on the hand-made pottery appeared when their surface was evened with a wisp of grass. An integral feature of this culture is an abundant use of bone, horn, and stone artefacts. Hillforts are the main archaeological monuments of this culture which existed for about a millennium. In the beginning, they were arranged on hilltops with minimal fortifications. Somewhat later, river bank capes came into service, too. Long existence, large habitat and different level of survival resulted in a great variety of the Brushed Pottery Culture hillforts.

Based on external appearance and fortification types, three main groups of the Brushed Pottery Culture hillforts can be distinguished; they are functionally and chronologically different. The first group covers rather small hillforts having up to



Brushed pottery.
Photo by Gintautas Zabiela.

³³ ČIVILYTĖ A. *Žmogus ir metalas priešistorėje: žvilgančios bronzos trauka*. Vilnius, 2014, p. 18, 22, 193.

³⁴ ГРИГАЛАВИЧЕНЕ Э.; МЯРКЯВИЧЮС А. *Древнейшие металлургические изделия в Литве (II–I тысячелетия до н. э.)*. Вильнюс, 1980, с. 14–15.

³⁵ ČIVILYTĖ A. *Žmogus ir metalas priešistorėje: žvilgančios bronzos trauka*. Vilnius, 2014, p. 146, 186.



Degėšiai Hillfort (Lithuania). Photo by Zenonas Baubonis.

30 m in diameter. They are located on hilltops and have no explicit fortifications or leveled tops. Their cultural layer tends to be thin and highly disturbed; often only traces of that can be found. Because of that, such hillforts often fail to be recognized as such, especially in Latvia and Belarus. Nowadays, their past is reflected only by the names they carry – the Hillfort, the Black Hill and so on – as well as by some random finds, such as stone axes and brushed potsherds. The hillforts of this group have no traces of foot settlements. Huge hillforts built on hilltops, having only natural fortifications and covering areas up to three hectares, also fall into this group. These may be just settlements or hillforts that used to cover only a part of the hill, which cannot be distinguished anymore. They should be the earliest hillforts of the Brushed Pottery Culture used only during the period of its existence.

The second group includes hillforts arranged on hilltops and bank capes and having oval or rectangular 30–80 m long leveled tops fortified with ramparts at the edges. Such hillforts often have

additional defense lines (ramparts and fosses) on the slopes. In case of hillforts that suffered more damage, these fortifications can be traced only due to undistinguishable terraces or fragments of slightly steepened slopes. These are the best researched hillforts of the Brushed Pottery Culture, which were used for a long period of time. Besides that, they were often used during the last stage of the culture – namely till the middle of the 1st millennium A.D. and after, which facilitated the survival of the cultural layer. Such hillforts often had rather large foot settlements covering several hectares. These remain almost unexplored.

The third group is represented by small hillforts arranged on the tops of small hills and having round leveled tops up to 20 m in diameter. They feature two or three circles of fortifications, i.e.: one defense line appears on the edge of the leveled top, others run on the slopes. These hillforts have been hardly researched; they feature no traces of foot settlements.

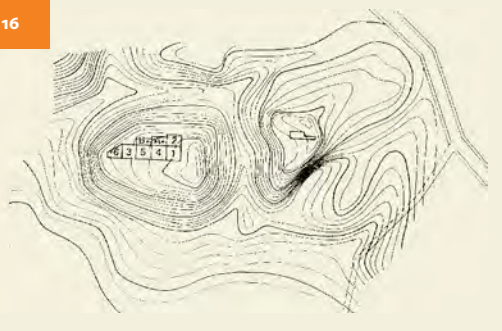
Recently, the Belarusian archaeologist Alyaksandr Egareychenka (Аляксандр Егарэйчанка) has



Sokiškės Hillfort (Lithuania). Photo by Lukas Kalvaitis.

Jašiškis Hillfort (Lithuania). Photo by Gintautas Zabiela.





Narkūnai Hillfort layout showing excavated sections (Lithuania) (KULIKAUSKIENĖ R. Narkūnų Didžiojo piliakalnio tyrinėjimų rezultatai (apatinis kultūrinis sluoksnis). *Lietuvos archeologija*, Vilnius, 1986, t. 5, p. 6, pav. 1).

distinguished two of the Brushed Pottery Cultures: the early and the late one. The early one existed for a long period of time; it was spread in the Eastern Lithuania, Northwestern Belarus, and Southeastern Latvia. It is assumed that the culture is reflected by over 50 hillforts. Meanwhile, the late Brushed Pottery Culture dating to the middle of the 1st century A.D. to the late 2nd or the 3rd century A.D. featured a considerable expansion southwards down to the left bank of the upper reaches of the Pripyat River and westwards up to the middle reaches of the Neman River³⁶. The number of hillforts increased considerably and reached about 250. However, similarities of lifestyle and material culture, while differences are mostly related to chronology, and use of the same hillforts during both stages would imply that no major changes happened in the Brushed Pottery Culture and that the alleged two cultures are just two stages of the same. The Culture of Dnieper-Daugava should also be considered a regional variation of this culture, which survived a bit longer. Its hillforts are going to be described in the following chapter of this publication as Belarusian and Russian researchers distinguish this archaeological culture as a separate one.

The Narkūnai Hillfort (Utena District, Lithuania) is deemed to be the oldest Brushed Pottery Culture

hillfort in Lithuania. It was extensively excavated in 1976–1978 by Regina Kulikauskienė (1916–2007) and Pranas Kulikauskas (1913–2004). Almost half of the top – the total area of 660 m² – was researched. Its present top is triangular and 55x35 m large, but it was formed when the medieval castle of Utena was built. During the period of the Brushed Pottery culture the top was narrower and longer. It is hard to determine its length, because its northern about 15 m wide edge has not been researched and beyond that a 55 m wide fosse was excavated to build a fore-work in the Middle Ages; the research of that also revealed the layer of the Brushed Pottery Culture³⁷. Therefore, the top of the initial Narkūnai Hillfort could be about 100 m long and about 30 m wide.

The early cultural layers of the hillfort were discovered beneath the layers of the medieval castle of Utena and they were relatively well preserved. The earliest layer was found about 2–3 m underneath the surface. It was approximately 30 cm thick. Along with shallow and chaotic finds of potsherds (the pots were slightly profiled at the shoulders), the layer revealed a bone pin with a prolonged triangular head and a bone arrowhead with a round cross-section and a flat tang. The hillfort top was uneven and adjusted to the actual landscape³⁸. The most ancient finds coming from the hillfort was a bronze eyed pin dating to the 14th–12th century B.C. and fragments of casting molds designed for the Meliar-type axes dating to the 7th century B.C.³⁹ The pin could have been brought to the hillfort later from some other location as it was found in the disturbed layer at the depth of some 20–30 cm, yet the fragments of as many as ten axe casting molds undoubtedly appeared during the hillfort use. At that time, the top was surrounded by a double or even

³⁷ PODÉNAS V.; LUCHTANAS A.; ČIVILYTĖ A. Narkūnų piliakalnio ir papėdės gyvenvietės keramika: elgsenos atspindžiai. *Lietuvos archeologija*, Vilnius, 2016, t. 42, p. 195, 206.

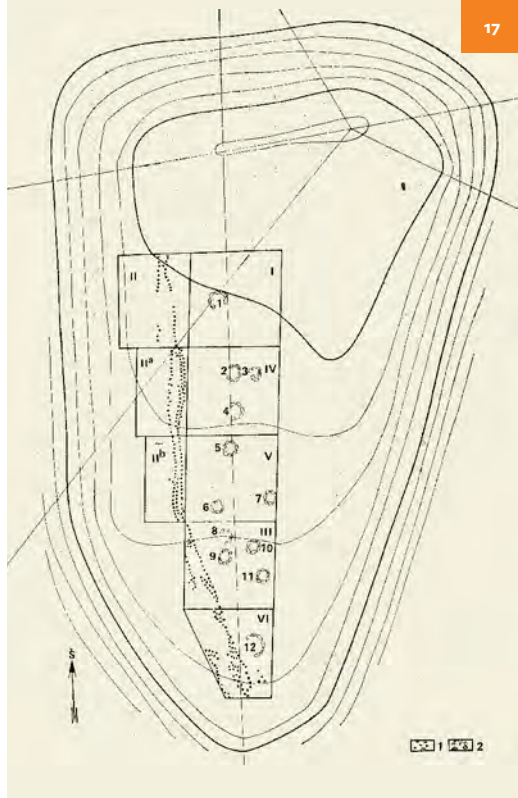
³⁸ KULIKAUSKIENĖ R. Narkūnų Didžiojo piliakalnio tyrinėjimų rezultatai (apatinis kultūrinis sluoksnis). *Lietuvos archeologija*, Vilnius, 1986, t. 5, p. 18, 30, 37.

³⁹ Ibidem, p. 32–33, 36.

³⁶ ЕГОРЕЙЧЕНКО А. А. *Культуры штрихованной керамики*. Минск, 2006, с. 9, 111.

triple palisade by the edge; it was build of 8–18 cm thick poles dug into the soil with a step of 6–13 cm and intertwined with thinner branches. The distance between the fences was 40–45 cm⁴⁰. The dating of the earliest cultural layer of the Narkūnai Hillfort is not quite clear. There were attempts to date it to the last quarter of the 2nd millennium B.C.⁴¹ as well as to the 9th–8th century B.C.,⁴² however, the most recent dating is that of the 11th–9th century B.C.⁴³ As the hillfort was used for many ages, its cultural layers are intermixed and indistinguishable in stratigraphic terms, which leaves a room for interpretations. One of those is a recent hypothesis about the travelling metallurgists working in the vicinity of the Narkūnai Hillfort⁴⁴. Still, it is hard to explain how such travelling metallurgists could fit into relatively closed communities.

The later stages of the Narkūnai Hillfort existence provide much more data. The middle horizon of the lower cultural layer dating to the middle of the 1st millennium B.C. or even a later period revealed 12 stone-encircled hearths of 1–1.2 m in diameter. They were features of the former houses. One of these houses should have been a 6–8 m large rectangular; it should have had at least three rooms. The hilltop was circumvented with pole-construction fortifications reinforced with up to five layers of stone paving and there was an up to 1 m high clay-daubed rampart and a fosse on the northern side⁴⁵. The cultural layer contained numerous bone



Postholes and loose stone hearths on the excavated part of the Narkūnai Hillfort (Lithuania) (KULIKAUSKIENĖ R. Narkūnų Didžiojo piliakalnio tyrinėjimų rezultatai (apatinis kultūrinis sluoksnis). *Lietuvos archeologija*, Vilnius, 1986, t. 5, p. 15 pav. 9).

artefacts (70 chisels, 45 pins, 40 arrowheads, etc.) as well as 45 stone articles, which unfortunately have not been correlated to the specific cultural layer horizons in the publication of the finds and, therefore, failed to be dated more precisely. 5,714 finds of animal bones attributed to 279 individual animals were broken into six horizons⁴⁶. This was the basis for the identification of the main husbandry and hunting trends. Pig bones dominate in all of the horizons (55 percent of the bones and 50 percent of

⁴⁰ Ibidem, p. 15–18.

⁴¹ GRIGALAVIČIENĖ E. Kada buvo apgyventi piliakalniai. *Lietuvos istorijos metraštis 1981*, Vilnius, 1982, p. 9, 17–18.

⁴² VOLKAITE-KULIKAUSKIENĖ R.; KULIKAUSKAS P. Narkūnų (Utenos raj.) archeologinių paminklų 1976 ir 1977 metų tyrimai. *Archeologiniai tyrimai Lietuvoje 1976–1977 metais*, Vilnius, 1978, p. 94.

⁴³ ČIVILYTĖ A. Žmogus ir metalas priešistorėje: žvilgančios bronzos trauka. Vilnius, 2014, p. 124.

⁴⁴ PODĖNAS V.; ČIVILYTĖ A.; BAGDZEVIČIENĖ J.; LUCHTANAS A. Technologiniai ir diagnostiniai Narkūnų Didžiojo piliakalnio techninės keramikos tyrimai. *Lietuvos archeologija*, Vilnius, 2016, t. 42, p. 170.

⁴⁵ KULIKAUSKIENĖ R. Narkūnų Didžiojo piliakalnio tyrinėjimų rezultatai (apatinis kultūrinis sluoksnis). *Lietuvos archeologija*, Vilnius, 1986, t. 5, p. 7, 9, 18.

⁴⁶ The investigations of zooarchaeologist Valentina Danilchenko (Валентина Данильченко) (Moscow).



Narkūnai Hillfort excavations (Lithuania), 1977.
Photo by Pranas Kulikauskas.

individual animals in the most ancient one and 61.3 percent and 58.5 respectively in the horizons dating to the last centuries B.C.). Cattle bones make only about a quarter of all bones found. Bones of wild animals make a similar percentage and the ones of furry animals prevail among them⁴⁷.

Interpreting of other archaeological materials found at Narkūnai is complicated due to uneven surface of the hillfort top during the Brushed Pottery Culture period and even leveling of the cultural layers, due to which the artefacts from different periods were aligned to the same horizons⁴⁸. Therefore, the most abundant group of the finds

(9,441 potsherds, many of which date to the early period B.C.) cannot lead us to any particular conclusions⁴⁹. This shortcoming of the earlier archaeological assessment appears in the research of other hillforts of the Brushed Pottery Culture as well.

Another well-researched hillfort of the early Brushed Pottery Culture happens to be located at the northwestern outskirts of its habitat – on the Dole island of the lower reaches of the Daugava River, which was recently flooded when the Hydroelectric Power Plant of Riga was built. In 1966–1967, Jānis Graudonis (1913–2005) and Jolanta Daiga (1920–1984) researched its hillfort called *Ķivutkalnis* (*Kalna-Ķivuti*, Salaspils District, Latvia). Its top had about 40 m in diameter and was damaged by the trenches during the WW1. The edges, where the ramparts used to be, were slightly

⁴⁷ ЛУХТАН А. Скотоводство и охота в Восточной Литве в I тысячелетии до н. э. (по материалам городища Наркунай). *Istorija*, Vilnius, 1986, t. XXV, p. 11–12.

⁴⁸ PODĖNAS V.; LUCHTANAS A.; ČIVILYTĖ A. Narkūnų piliakalnių ir papėdės gyvenvietės keramika: elgsenos atspindžiai. *Lietuvos archeologija*, Vilnius, 2016, t. 42, p. 217.

⁴⁹ Ibidem, p. 209–210.

elevated. The height of the slopes varied from 1.5 (in the east, from the side of the eminence) to 10 m. The hillfort was examined fully (2,276 m²). The excavations revealed the 1.6–3.0 m thick cultural layer with 2,700 different artefacts, 38,000 potsherds, and 11,600 animal bones.

Due to the thickness of the cultural layer, it was broken into as many as ten horizons during the excavations, yet when the finds were summarized only four main stages of the hillfort development were distinguished. It turned to be impossible to define the building layout specifics for each of them, however, the individual buildings marked by 52 hearths, postholes, and concentrated artefacts were rather small with the length and width varying from 2.4 m to 6 m. The most ancient fortifications of the hillfort were wooden fences surrounding almost rectangular 50x25 m large top with two to four rows. They date to the brink of the 2nd and the 1st millennium B.C. The 10–15 cm thick posts were dug 1.7–2.0 m from one another. Later, an up to 1.2 m high rampart was erected; its basement was made of stones and the surface was reinforced with clay. The reconstruction of the fortifications took place around the 7th century B.C. During the third stage, the rampart was reinforced by erecting 1.0–2.5 m large boxes filled with sand and raising the rampart to the height of 3 m; the new rampart was reinforced with clay as well. This reconstruction dates to the 5th century B.C. Finally, a new rampart was moved 2–3 m towards the edges of the top⁵⁰.

The material culture of the inhabitants of the Kalna-Ķivuti Hillfort remained almost the same during the entire period of its existence, although it stretched over a millennium. Stone axes (there were 98 of them found including the whole ones and fragment) were featured by all of the horizons of the cultural layer. Bronze was smelted at the hillfort, too, which is proved not only by 65 bronze artefact finds, 544 fragments of clay casting molds, and 191

fragments of clay crucible, but also by at least two hoards, which are a rarity at hillforts. One of them included two neck-rings and a tutulus dating to the 8th–7th century B.C.; another included an axe, a bracelet and a tutulus dating to the 4th century B.C. An unexpected discovery was seven inhumation burials dating to the middle of the 1st millennium B.C. The burials were discovered in the area of the entrance into the hillfort⁵¹.

The entirety of bone and stone artefacts and over 90 percent of the brushed pottery sherds found during the excavations imply that the Kalna-Ķivuti Hillfort is attributable to the Brushed Pottery Culture and, therefore, to the legacy of the ancient Balts. This was also an important metallurgical centre of this culture.



Hordes of bronze artefacts found at Ķivutkalnis (Latvia) (GRAUDONIS J. *Nocietinātās apmetnes Daugavas lejtecē*. Rīga, 1989, XLVI tab.).

⁵⁰ GRAUDONIS J. *Nocietinātās apmetnes Daugavas lejtecē*. Rīga, 1989, p. 12–20.

⁵¹ Ibidem, p. 41–43, 50–51.



Ratyunki Hillfort (Vitebsk Oblast, Belarus)
(ЕГОРЕЙЧЕНКО А. А. *Культуры штрихованной керамики*). Минск, 2006, рис.3).



Nevieriškė Hillfort (Lithuania).
Photo by Zenonas Baubonis.

In Belarus, the Ratyunki Hillfort (Braslaw District, Vitebsk Oblast) can serve as yet another example of a well-researched Brushed Pottery Culture hillfort. In 1978–1979 and 1981, it was researched by Lyudmila Duchic (*Людмила Дучиц*), in 1999–2008 – by A. Yegoreichenka, and in 2000 – by Aleksandr Medvedev (*Александр Медведев*)⁵². The hillfort is

located on a separate 6 m high hill with steepened slopes. Its top is oval and 40x36 m large. The present outlook of the hillfort was shaped by the castle of the Kievan Rus period; its remains covered the earlier cultural layers. The area of 1,008 m², which is two thirds of the top, was excavated at the hillfort⁵³. Remains of burned wooden fortifications were found only on the northern slope of the hillfort under the 1.5 m thick cultural layer. The lower layers featured well-preserved hearths of about 1 m in diameter that were delimited with 0.1–0.15 m thick clay verges (18 of them were discovered in total). The hearths were scattered irregularly on the hillfort top. The very cultural layer, which was 0.4–1 m thick, contained abundant bone and stone artefacts. The bone artefacts were mostly perforators and chisels, the stone artefacts were mostly hafted axes. The animal bones were mostly those of sheep and goats; their separation revealed that sheep dominated (21.6 percent of all the bones). The hillfort also exposed a large collection of fish bones and scales; its examination revealed 12 species of fish used for food. These were mostly predators: pikes (43.7 percent) and bass (31.5 percent); among non-predator fish breams dominated (9.8 percent)⁵⁴. The Ratyunki Hillfort was established by representatives of the Dnieper-Daugava culture, yet it was influenced by the Brushed Pottery Culture, too⁵⁵. The early cultural layer attributable to both cultures dates to the 7th century B.C. – early 1st century A.D.⁵⁶ On its lowest level, at the depth of 0.9 m, a collective burial of four individuals was found. There was an almost 2 m tall, about 40 years old man, a 18 years old woman, another woman, whose remains were in poor

⁵³ ДУЧИЦ Л. В.; МИТРОФАНОВ А. Г. Городище Ратюнки. *Гістарычна-археалагічны зборнік*, Минск, 1994, т. 5, с. 163–182.

⁵⁴ ЕГОРЕЙЧЕНКО А. А. *Культуры штрихованной керамики*. Минск, 2006, с. 45, 48–49.

⁵⁵ ЕГОРЕЙЧЕНКО А. А. История археологического изучения древнейших городищ в Браславском Поозерье. *Вестник Беларускага дзяржаўнага ўніверсітэта*, Минск, 2012, серія 3, нр. 1, с. 4.

⁵⁶ ДУЧИЦ Л. В.; МИТРОФАНОВ А. Г. Городище Ратюнки. *Гістарычна-археалагічны зборнік*, Минск, 1994, т. 5, с. 180.

⁵² ЕГОРЕЙЧЕНКО А. А. Исследования в Ратюнках. *Археологические открытия 2003 года*, Москва, 2004, с. 530–532; ЕГОРЕЙЧЕНКО А. А. Раскопки в Ратюнках. *Археологические открытия 2004 года*, Москва, 2005, с. 539–541.

condition, and a 3–4 years old child buried in-between. The burial dated to the 7th century B.C.⁵⁷

Still, the Nevieriškė Hillfort (Švenčionys District, Lithuania) is probably the best researched of all the hillforts of the Brushed Pottery Culture. It is located on a stand-alone hill on the right bank of the Dėmė River. The top of the hillfort is round; it has about 50 m in diameter and its northwestern side slightly goes downwards. The slopes are smooth, about 5–7 m high, the upper section of about 2 m is steepened manually. In 1976–1978, Elena Grigalavičienė (1933–2005) excavated about two thirds of the top (1,486 m²)⁵⁸. It was established that the hillfort underwent at least four reconstruction stages.

The lower cultural layer of the Nevieriškė Hillfort contained flint artefacts (an axe, two arrowheads, and a knife) as well as fragments of two boat shaped stone axes. According to the researchers, these artefacts belonged to an earlier unfortified settlement located on the same hilltop and dating to the middle of the 2nd millennium B.C.

The earliest fortification of the Brushed Pottery Culture hillfort was a double palisade by the edge of the top build of 8–10 cm thick poles. Behind that, there were 4–6 m large rectangular wooden pole-construction dwelling houses with hearths having about 1 m in diameter. Six of them were found and they were built in two rows. In their vicinity, a lot of artefacts were excavated including brushed potsherds, stones with bored shaft-holes and hafted axes, bone awls, scrapers, pins, daggers, and spearheads.

After the barrier and the buildings burned, the hillfort was reconstructed. The top was widened reinforcing the edge with clay and new houses were built (13 of them were found). The fortifications, most probably, also consisted of wooden fences and steepened slopes. Some of the houses



Stone axes from the Nevieriškė Hillfort (Lithuania).
Photo by Gintautas Zabiela.

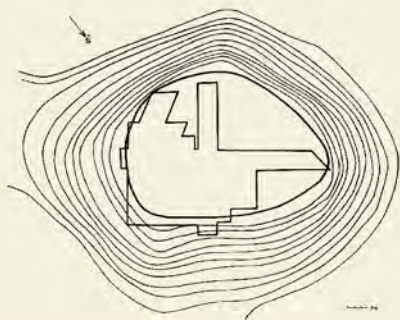
underwent reconstruction later, which implies that the settlement existed quite long; however, finally it was destroyed by fire, too. The fire could have been a result of an attack, because there were bone arrowheads and spearheads found by the edge and 23 egg-shaped ceramic weights from a vertical loom or net were found by the hearth of one of the houses along with 5 broken pots. The later implied that the building was left in haste. After a certain period of time, the houses on the hillfort were rebuilt. This time they formed a circle around the central area where the entrances were located, as it seems. The inhabitants of this settlement already used bronze at this stage as remains of melting crucibles were found. All the three stages of the hillfort

⁵⁷ МИХАЙЛОВСКАЯ С. Сквозь столетия. *Беларусская думка*, 2014, № 10, с. 24.

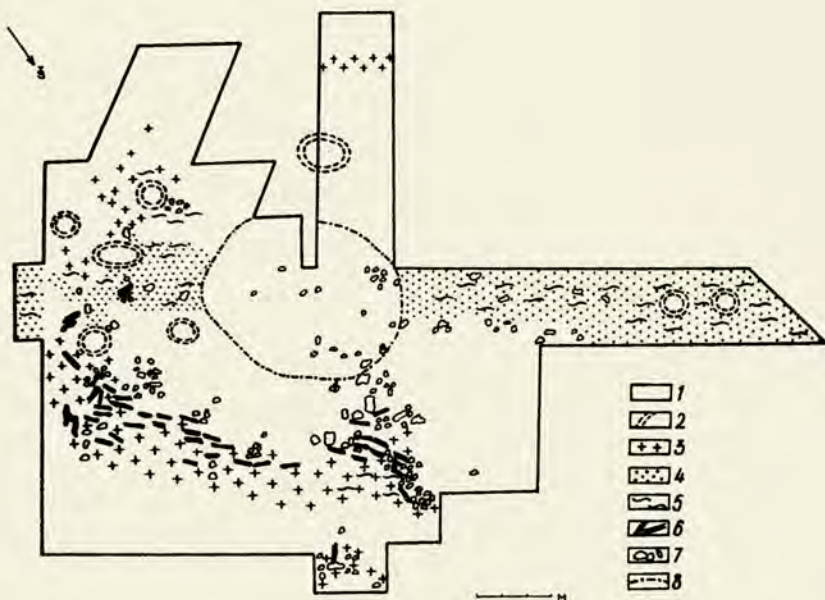
⁵⁸ GRIGALAVIČIENĖ E. Nevieriškės piliakalnis. *Lietuvos archeologija*, Vilnius, 1985, t. 5, p. 52–88.



Sauginiai Hillfort (Lithuania)
(BURAČAS B. *Lietuvos piliakalniai*.
Vilnius, 2011, p. 354).



Sauginiai Hillfort layout showing excavated areas
(Lithuania) (ДАУГУДИС В. *Городище Саугиняй*,
Древности Литвы и Белоруссии.
Вильнюс, 1988, с. 53 рис. 2, с. 56 рис. 4).





Bijeikiai Hillfort (Lithuania). Photo by Gintautas Zabiela.

development share similar building remains and artefacts and, therefore, date to the 1st millennium B.C.

During the last stage of the hillfort existence, its top was surrounded with a 5–9 m thick clay rampart. The timing was hinted by two bronze bracelets shaped for a child and found underneath. They dated to the early 1st millennium A.D. The latest cultural layer of the hillfort was disturbed by ploughing, which continued even in the 2nd half of the 20th century (almost till the beginning of the excavations). It contained all types of the artefacts of the period, i.e. iron awls, pins, knives, fishing hooks, axe fragments, bronze rings, bracelets, spirals, and

a pendant. There were no finds of the rusticated pottery, which started appearing in the eastern Lithuania since the 3rd century A.D. implying that the hillfort was deserted about that time.

The cultural situation of the early Western-Lithuanian and Latvian hillforts is ambiguous. These hillforts are poorly researched as well. Although brushed pottery was found therein, namely, in Vedriai (Šilalė District) and Vėlaičiai and Kurmaičiai (Kretinga District) in Lithuania and Paplaka (Liepāja District) in Latvia,⁵⁹ the stone and bone artefacts

⁵⁹ ВАСКС А. Керамика эпохи поздней бронзы и раннего железа Латвии. Рига, 1991, с. 25–30, 159.

typical for the Brushed Pottery Culture were absent. Indefinite archaeological monuments without a clear cultural layer and the lower cultural layers of some excavated hillforts featuring few finds are also attributed to the Brushed Pottery Culture⁶⁰; however, it would be too early to draw any extensive conclusions until a real early hillfort of this region undergoes a thorough excavation.

One early hillfort researched in the Western Lithuania is the one of Sauginiai (Šiauliai District). However, it has been left by representatives of some other culture, not the Brushed Pottery one. It is located on a stand-alone hill on the northern bank of the Jonelaičiai Lake, where the water level has been raised and the hill has turned into an island recently. The top of the hillfort is oval; it is 28x20 m large and there are no traces of external fortifications. The steepness of the slopes is medium; they are 7 m high. In 1973, Vytautas Daugudis (1929–2002) excavated about 70 percent of the top (350 m²). Remains of a 1 m thick double fence were found by the edge. The fence was made of 15–20 cm thick poles dug in with a step of 1.5–2.5 m that held horizontal logs daubed with clay. From the internal side, the fence was reinforced with stones. The entrance, as it seems, was located in the northwestern part of the hillfort top as a 2 m long section of pavement made of small stones was discovered here. As for the buildings, no explicit traces were found. The cultural layer was up to 0.8 m thick and dated to the late 1st millennium B.C. It contained very few finds, just a fragment of a stone axe, a hack, potsherds with even surface, and pieces of clay daub. The finds and a single horizon of the cultural layer

imply that the hillfort was used only for a short period of time and that it was deserted as soon as the fortifications burned down. The researcher dated the hillfort to the 1st half of the 1st millennium B.C.⁶¹.

In the later phase of the Brushed Pottery Culture, which is approximately from the 1st millennium B.C. to the brink of the 1st millennium A.D., its people began to use metal articles. Although such articles are found rarely in the cultural layers of the researched hillforts, they still provide some clues to the variety of metal articles, nonetheless. Iron knives, sickle-knives, awls, needles, hooks, and razors were used in daily life. As for the weaponry, spearheads and spurs with spikes are found most often. Crook-like iron pins and bronze temple ornaments, pendants, and crossbow fibulas were the most popular jewelry.

The Brushed Pottery Culture went into decay on the brink of the 2nd and 3rd century A.D. The causes are not clear, yet there was a certain impact of the immediate or more distant neighbours. An internal regrouping of the tribes in the Eastern Baltic, which took place in the first few centuries A.D., ended the existence of the Brushed Pottery Culture. The Eastern Lithuania obviously experienced a mass immigration of the Western Balts from their southwestern habitat. They brought in the rusticated pottery, barrow burials, and unfortified settlements. It looks like the North-Eastern Lithuania and South-Eastern Latvia also accepted migrants from the Western or Northern Lithuania or Southern Latvia that brought in the pottery with even surface, barrow burials, and unfortified settlements, too. The causes of this culture disappearance in Belarus remain unidentified.

⁶⁰ DAUGUDIS V. I tūkstantmečio pr. m. e. Šiaurės Žemaitijos piliakalniai (1. Būdingesnieji piliakalnių bruožai ir įtvirtinimai). *Lietuvos TSR mokslų akademijos darbai. A serija*, Vilnius, 1986, t. 2(95), p. 31–42; DAUGUDIS V. I tūkstantmečio pr. m. e. Šiaurės Žemaitijos piliakalniai (2. Pastatai). *Lietuvos TSR mokslų akademijos darbai. A serija*, Vilnius, 1987, t. 2(99), p. 39–48; DAUGUDIS V. I tūkstantmečio pr. m. e. Šiaurės Žemaitijos piliakalniai (3. Radiniai). *Lietuvos TSR mokslų akademijos darbai. A serija*, Vilnius, 1989, t. 1(106), p. 74–88.

⁶¹ ДАУГУДИС В. Городище Саугиний. *Древности Литвы и Белоруссии*, Вильнюс, 1988, с. 51–58.

The Most Eastern Bulwarks: the Hillforts of the Dnieper Balts

Although some of the researchers argue that the Balts should be broken only into the Western and the Eastern ones, the traditional division is the Western, the Eastern, and the Dnieper Balts. The concept of the Dnieper Balts covers the Baltic cultures with the habitats in the upper reaches of the Dnieper and Oka Rivers and the middle reaches of the Daugava River. Now these are the territories of Belarus, Russian Federation, and Ukraine⁶².

Usually, the cultures of the Dnieper Balts include the Dnieper-Daugava Culture, the culture of the Upper Reaches of the Oka, the Yukhnove culture, and the Milagrad culture, all of which formed in the 1st millennium B.C., as well as the cultures of Kolochin, Bancerov-Tushemlya, and Moshchin, which emerged later in the same habitat⁶³. Many nowadays researchers agree on such distinction of the most-eastern Baltic cultures, although the Baltic nature of some of them, i.e., the ones of Yukhnove or Kolochin, sometimes comes under doubt. The Moshchin culture is attributed to the eastern Galindians, and the Galindians play a very interesting and important role in the overall migration and ethno-cultural processes⁶⁴. Some of the

researchers consider the Dyakov culture to be Baltic, too. Its habitat used to be in the western part of the modern Russia, on the Valday heights, by the upper reaches of the Oka and the Volga Rivers. The Dyakov Culture is considered to be Ugric-Finnish in its nature, yet its late stage (the first centuries A.D. – the so called Baltic period – features an explicit strengthening of the Baltic influence in terms of culture (and maybe even population).

The cultures of the Dnieper Balts went into a gradual decay in the 2nd half of the 1st millennium A.D., when the Slavs started penetrating the former Baltic habitat by the Dnieper River. Eventually, the Baltic communities were assimilated and some of them were probably destroyed in the result of military actions. Islands of the Moshchin culture in the Oka upper reaches lasted the longest in the encirclement of the Slavs (till the 11th–12th century); they are attributed to the eastern Galindians known from the written sources.

In the 1st millennium B.C., the Baltic culture of the Oka upper reaches was the most eastern one. Its habitat stretched in the Oryol and Kaluga Oblast of the modern Russian Federation as well as in the western part of the Tula Oblast. This culture was similar to the Dnieper-Daugava culture and lasted from the 5th to the 1st century B.C. or from the 6th to the 2nd according to other data. Its people were mostly involved in fishing and hunting. Metal

⁶² VITKŪNAS M. Baltų karyba viduriniajame ir vėlyvajame geležies amžiuje. Dniepro baltai. *Karo archyvas*, Vilnius, 2009, t. XXIV, p. 4–34.

⁶³ СЕДОВ В. В. Днепровские балты. *Проблемы этногенеза и этнической истории балтов*, Вильнюс, 1981, с. 20–30.

⁶⁴ JOVAIŠA E. *Aisčiai. II knyga*. Vilnius, 2014, p. 238–251.



Reconstruction of the Radovichche fortification (Oryol Oblast, Russian Federation). Painter Vladimir Nedelin (Владимир Неделин) (КРАСНОЩЕКОВА С. Д.; КРАСНИЦКИЙ Л. Н. *Археология Орловской области*. Орел, 2006, с. 316).

articles were rare in its habitat and the burial rites remain a mystery as no burials attributable to this culture have been found yet.

As for the present, we know over 50 hillforts and over 70 settlements attributable to the Culture of the Oka Upper Reaches. More extensive excavations of the settlements began only recently. For many years, it was assumed that communities of the Oka Upper Reaches Culture lived only in hillforts. The hillforts of this culture feature ramparts, often daubed with clay, which was sometimes annealed during construction to ensure stability of the rampart. The buildings were of pole framework construction. A typical feature of the hillforts and settlements of the Oka Upper Reaches Culture were 8-shaped hearths dug into the soil⁶⁵.

The Radovichche (Радовище) Hillfort (Oryol Oblast, Russian Federation) is one of the best researched hillforts of the Oka Upper Reaches Culture. In 2004–2005, its excavations were performed by the archaeological expedition of the Oryol Local Research Museum led by Svetlana Krasnoshchekova (Светлана Краснощекова). It is assumed that the hillfort was used since the 4th–5th century B.C. It is located in a marshy area on a hill by a brook. The hill was rather low, rising only 3 m above the area. Its top was leveled and adjusted for the construction of a 88x44 m large fortified settlement. The slopes were steepened where they were too flat. A 2 m deep fosse was excavated around the hillfort and the top was surrounded with a rampart; its surviving fragments are 1.5–2.0 m high. There are also fragments of another lower rampart. On the top of the main rampart, there were poles with logs laid horizontally in two parallel rows between them. This wall was daubed with clay. It is assumed that the gate was in the western part of the hillfort and that there could have been a platform for the guards over that. It is also assumed that there could have been a drawbridge over the fosse.

⁶⁵ СТОЛЯРОВ Е. В. Культурные комплексы Верхнего Поочья эпохи раннего железного века. *Вестник Воронежского государственного университета. Серия: История. Политология. Социология*, Воронеж, 2012, нр. 1, с. 174–176.

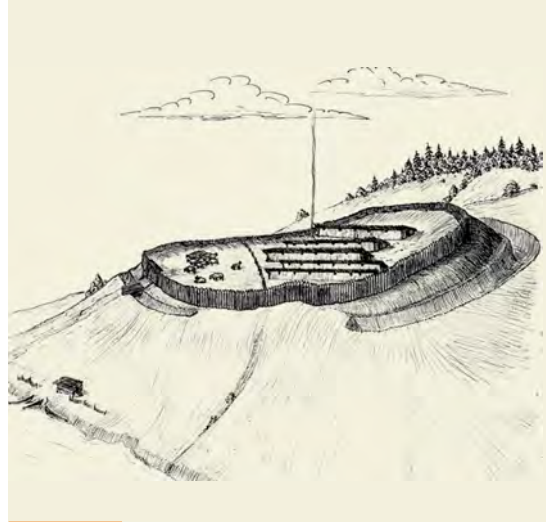
Within the hillfort, dwelling pole framework houses were built along the defensive wall. Their walls were of wattle and daub structure. The roof was reinforced with beams, poles were laid on top, and the roof was covered with thatch or turf. The floors were slightly lowered; these were clay or wooden floors. The houses were heated with open hearths.

It is assumed that a wooden idol was built in the center of the hillfort yard. An individual post-hole was discovered there along with traces of ritual fireplaces. Several such fireplaces were found around the alleged idol.

The cultural layer of the hillfort attributable to the Oka Upper Reaches Culture period was 20–30 cm thick. It contained abundant potsherds and pieces of clay daub. Ceramic net weights are also an often find, which implies that fishing was an important activity for the residents of the hillfort. They were also involved in hunting and wild honey harvesting. The early cultural layer of the hillfort contained no metal artefacts.

Some time, after the hillfort was built, it came under attack. This is witnessed by charcoal mixed with newly brought soil, which was used to rebuild the fortifications. The ramparts were reinforced with log and stone constructions inside of them. The traces of at least several attacks were found. On the brink of the 1st and the 2nd millennium A.D., the Radovichche Hillfort settlement was destroyed and deserted. It is assumed that the destruction was caused by the people of the Pochev Culture, which started spreading in the region about that time⁶⁶.

The Yukhnove Culture was contemporary to the Culture of the Oka Upper Reaches. Its habitat was south-westwards in the modern Kaluga, Tula, Bryansk, and Kursk Oblast of the Russian Federation, Chernihiv Oblast of Ukraine and Gomel Oblast of Belarus. Researchers date this culture to the 5th–1st or 7th–3rd century B.C.

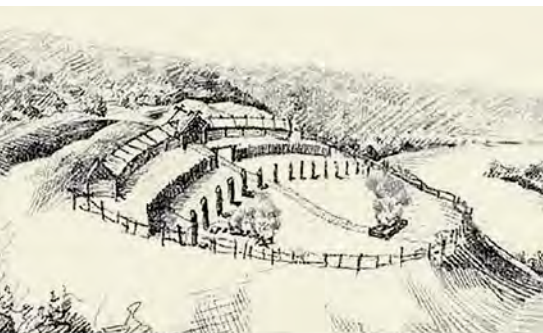


Reconstruction of the fortified settlement at the Zakhidne Yukhnove Hillfort (Chernihiv Oblast, Ukraine). Author Dmytro Karavaiko, painter Serhiy Razumov (КАРАВАЙКО Д. В., ГОРБАНИЧЕНКО С. А. *Господарство носіїв юхнівської культури*. Київ, 2012, с. 24).

The Yukhnove Culture was named after the Yukhnove (ЮХНОВЕ) Hillfort in the Chernihiv Oblast of Ukraine located near Novhorod-Siversky (Новгород-Сіверський). This culture is best known for its hillforts. They make 95 percent of its archaeological legacy; unfortified settlements are found rarely. This could have been caused by the fact that the people of the Yukhnove Culture lived under a constant threat and, therefore, fortified settlements were a necessity. On the other hand, it may be the case that the archaeological excavations have not been sufficient and the future excavations will reveal that the people of this culture lived in unfortified settlements as well.

The habitat of the Yukhnove Culture is dominated by relatively small, only 0.1–0.5 ha large, hillforts. Most of them were built on bank capes separated from adjacent eminences with ramparts and fosses. Usually, there was only one rampart and

⁶⁶ КРАСНОЩЕKOBA C. Д.; КРАСНИЦКИЙ Л. Н. *Археология Орловской области*. Орел, 2006, с. 242.



Reconstruction of the Yukhnove Culture shrine at the Blagoveshchenskaya Gora Hillfort near the Vshchizh village (Bryansk Oblast, Russian Federation). Author Boris Rybakov (Рыбаков Б. А. *Язычество древней Руси*. Москва, 2013, с. 166).

one fosse; double or triple ramparts and fosses are found rarely. Most of the ramparts were about 1.5 m high, yet some of them were much more massive. For instance, the Sobichi Hillfort (Chernihiv Oblast, Ukraine) has a 5 m high rampart.

The Kudlayvka (*Кудлаївка*) Hillfort (Chernihiv Oblast, Ukraine) is one of the best researched hillforts of the Yukhnove Culture. In 1965–1967, the archaeological expedition led by Olga Melnikovskaya (*Ольга Мельниковская*, 1921–2008) excavated its entire top, which is 3,250 m². It was established, that initially, this hillfort surrounded by the river curve had no rampart; the top was surrounded only with a fence. Its traces – post-holes – were discovered under the rampart, which was erected later to separate the hillfort from the adjacent eminence. The rampart, the height of which reached 3 m, was built in three stages. From the inside, it rested on a wooden wall. The defensive wall was built on the top of the rampart. It is interesting that the bottom of the sites of the two of its postholes contained skulls of a dog and a horse. They are assumed to be traces of ritual offerings. There was an about 3 m wide clearance in the rampart – the gateway. A rather spacious yard of the hillfort hosted four parallel, long (about

40 m) and wide (4–6 m) buildings. The discovered post-holes implied that the buildings had porches or some other additions. Each of the longhouses had several open hearths; one had none and was assumed to be used as a barn.

The Zakhidne Yukhnove (*Західне Юхнове*) Hillfort (Chernihiv Oblast, Ukraine) had a similar layout. Along with the Eastern Yukhnove (*Східне Юхнове*) Hillfort and its foot settlement it forms a complex of archaeological monuments, the research of which began already in the 19th century. In 1873 and 1876, Dmitry Samokvasov (*Дмитрий Самоквасов*, 1843–1911) excavated the total area of 120 m² at the hillforts. In 2004, Dmytro Karavayko (*Дмитро Каравайко*) excavated 40 m² at the Western Yukhnove Hillfort and researched the foot settlement. It was established that the Western Yukhnove Hillfort hosted three parallel wooden longhouses. Two of them underwent as many as five reconstructions; the third one was reconstructed twice. Reconstructions involved replacement of wooden floors and renovation of the walls. The longhouses were 3.4–4.5 m wide. It is interesting that this hillfort dating to the 4th–3rd century B.C. exposed not only open hearths, yet also features of some primitive ovens.

Besides that, the Western Yukhnove Hillfort exposed a sunken hut, which was rather typical to this culture. The earth loge was 6x5 m large. It was dug into the slope down to 1.6–1.7 m from the surface; however, part of the building could have stood above the surface.

It is assumed that the southwestern part of the hillfort, which was closer to the river valley, was left clear and used to keep the cattle. It could have been let out to the pastures in the valley through the gate discovered in this part of the hillfort. It is assumed that there should have been another gate leading to the adjacent eminence, which hosted an unfortified settlement.

Most of the Yukhnove Culture hillforts had longhouses built along the perimeter of the top and divided into separate rooms. The rear-walls



of these longhouses rested on the rampart. Longhouses along the perimeter of the top were also built at the hillforts, which had no ramparts. In such cases, the rear-wall of the longhouse made a defensive wall of the hillfort. Similar longhouses were popular in the habitats of other Baltic cultures (the Dnieper-Daugava Culture, the Brushed Pottery Culture), too.

So far, the research implies that the Yukhnove Culture habitat mostly featured hillforts with two types of the buildings. Longhouses built along the perimeter of the top and several longhouses built in the center of the top in parallel to one another. Traces of stand-alone houses built in the center of the hillfort yard were also found. Sunken hut is another structure typical to the Yukhnove Culture. Many of the hillforts also had storage pits. Some of them were broader at the bottom than at the top reminding a trapezium, which helped to keep them cooler. Such pits were covered and had at least one stair leading into them; they were used as cellars⁶⁷.

Archaeologist Boris Rybakov (*Борис Рыбаков*, 1908–2001) assumed that there was an important settlement of the Yukhnove Culture at the hillfort called Blagoveshchenskaya Gora (*Благовещенская*

Švedskaja Gorka Hillfort of the Milograd Culture by the Sozh River near Gomel (Gomel Oblast, Belarus) (anonymusi.livejournal.com).

gora) located near the Vshcizh (*Вщиж*) Village (Bryansk Oblast, Russian Federation). In 1948–1949, an area of 550 m² was excavated at this hillfort. The hillfort was built on a bank cape and separated from the adjacent eminence with a rampart with a longhouse resting on that. The longhouse was 60 m long and 6 m wide. According to the researcher, huge post-holes forming a half-circle in the centre of the yard near the fireplace were remains of idols symbolizing deities⁶⁸.

The Yukhnove Culture people were engaged in hunting, fishing, agriculture, and husbandry. Metal articles were also found in the habitat of this culture; they imply the influence of the Scythians.

Some of the Yukhnove Culture hillforts also had burials on the tops and slopes or elsewhere nearby. The burial practices included both cremation and inhumation. Burial rites represent a complex and still poorly researched aspect of this culture.

The western neighbor of the Yukhnove Culture was the Milograd Culture dated to the 7th–3rd

⁶⁷ КАРАВАЙКО Д. В. *Памятники Юхновской культуры Новгород – Северского Полесья*. Киев, 2012, с. 17–46.

⁶⁸ РЫБАКОВ Б. А. *Язычество древней Руси*. Москва, 2013, с. 164–168.

century B.C. (or the 7th–1st century B.C. or even the 1st century A.D.). This culture was spread in the modern southeastern Belarus and northern Ukraine. It was named after the Milagrad (*Мілаград*) Hillfort (Gomel Oblast, Belarus). The Milagrad Culture people earned their living mostly from agriculture and husbandry; hunting and fishing were less important. They made bronze and iron articles and knew how to smelt bog iron.

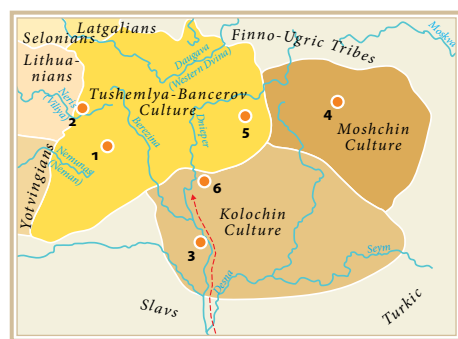
The people of this culture buried their dead at flat burial grounds; both cremation and inhumation were practiced. Some of the burial grounds were located close to hillforts, right outside the ramparts. Random individual burials were found even on some of hillfort tops.

In the habitat of the Milagrad culture, hillforts were of three types. Some were built on the eminences in usually marshy lowlands (sometimes even indistinguishable ones), others – on bank capes and hilltops. A lot of unfortified settlements of this culture are known as well. Some were built next to

hillforts, other were stand-alone. Most of the houses were built on the ground; 12–16 m² large sunken huts of pole construction were also widespread.

According to Mikhail Lashankov (*Міхал Лашанкоў*), there are 221 hillforts of the Milagrad Culture in Belarus. More than a half of them (128) were built in lowlands, 33 – on capes, and 18 – on hilltops. The lowland-type hillforts are especially widespread in the marshy region of Polesia. Here, out of the total number of 95 hillforts, 80 are of lowland type, 10 are cape-type, and only 5 are hilltop-type. In the Dnieper basin, lowland-type and cape-type hillforts are represented almost equally (33 and 32 respectively), and in the basin of the Sozh River, the cape-type hillforts prevail clearly (33 against 15 lowland-type hillforts respectively). Hilltop-type hillforts are rare in all three regions; their numbers vary from 5 to 8. Compared to other Baltic cultures, the lowland-type hillforts were the most typical to the Milagrad Culture⁶⁹. This was caused by the environment specifics as a great part of its habitat was located in the marshy region of Polesia stretching in the southern Belarus and northern Ukraine.

The lowland-type hillforts were mostly built on eminences or islands in the marshes and floodplains. The Khalopyenichy (*Халопенічы*) Hillfort (Mogilev Oblast, Belarus) was built on an almost round sandy island in the marches. The island had about 74 m in diameter. The hillfort was surrounded with a 10–13 m wide rampart, which was up to 2 m high from the external side and up to 0.8 m high from the inside. In 1978, A. Jegareichenka excavated 220 m² of the hillfort. The cultural layer on the top was 30–70 cm thick. The initial hillfort built on the island around the 6th century B.C. was surrounded only with the pole-construction fence; there was no rampart. It was built only after the fence burned on the brink of the 4th and the 3rd century B.C. The first rampart attributable to the Milagrad Culture period is assumed to be about 1 m high and 7.5 m wide. The



---> The Early Slavs penetration into the former Baltic lands (from VI c.)

Cultures of the Eastern Balts in middle of 1st millennium A.D. and hillforts, mentioned in the text:

1 – Bancaroushchina (Minsk Oblast, Belarus);
2 – Garadzishcha (Minsk Oblast, Belarus); 3 – Kalochyn (Gomel Oblast, Belarus); 4 – Moshchin (Kaluga Oblast, Russian Federation); 5 – Tushemlya Smolensk Oblast, Russian Federation); 6 – Zalutamino (Gomel Oblast, Belarus). Drawing by Edita Namajūnienė.

⁶⁹ ЛОШЕНКОВ М. И. *Городища Милоградской культуры на территории Беларуси*. Минск, 2011.

rampart piled over that and surviving till nowadays was attributed to the later Zarubincy Culture. The first rampart had some wooden construction on top (a fence built of vertical poles or horizontal logs). No clear traces of the building were found during the archaeological excavations as the hillfort was ploughed for a long time and its cultural layer was disturbed intensively. However, abundant potsherds and other artefacts prove that people lived there⁷⁰.

The cape-type Garoshkav (*Гарошкаў*) Hillfort (Gomel Oblast, Belarus) located on the right bank of the Dnieper is one of the biggest in the Milagrad Culture habitat. In 1954 and 1961, the archaeological expedition led by Olga Melnikovskaya (*Вольга Мельнікоўская*) excavated 5,400 m² of the hillfort. It was dated to the 4th–1st century B.C. The hillfort top is 2 ha large. It is triangular, 2 m wide and a 12 m rampart divides it into two parts. Another 3.5 m high and 16 m wide rampart separates the hillfort from the adjacent eminence. Only the part between the inner rampart and the river was inhabited. Twenty dwelling houses were discovered there. Their areas varied from 9 m² to 50 m², yet 12–16 m² large houses dominated. They had a rectangular, oval or round layout. Construction of the walls was of two types. For some houses, they were built of horizontal logs held by vertical poles, in other houses, wattle and clay daub construction was used. The dwelling houses were dug into the soil for 25 to 60 cm. Next to them, there were square outhouses (from 2x1.5 m to 2.5x2 m large) and storage pits, which were covered semi-cellar. Here, various household utensils, tools, and even some weapons were found. In the area between the inner and the external rampart of the hillfort and beyond the later, cremation burials were discovered. There also traces of a 8.5x1.5 m large sunken hut dug into

the soil for 50 cm, which was allegedly used for the purposes of the religious cult⁷¹.

Northwards from the Milagrad Culture, there was the habitat of the Dnieper-Daugava one. In the west, its habitat bordered with the Brushed Pottery Culture, which was very close to that in cultural and ethnical terms (it was described in the previous chapter of this book). The development of the Dnieper-Daugava Culture is broken into three stages: the early stage (the 8th–5th century B.C.), the middle stage (the 5th–1st century B.C.), and the late stage (the 1st–5th century A.D.). Throughout all the three stages, the people of this culture lived in fortified settlements, i.e. the hillforts. There are at least 200 hillforts of this culture in Belarus alone.

During the period of its maximal expansion, the habitat of the Dnieper-Daugava Culture covered the Smolensk Oblast, the northern part of the Bryansk Oblast, the western part of Kaluga Oblast, and the southern outskirts of the Pskov and Tver Oblast in the Russian Federation, as well as the north-eastern part of the Mogilev Oblast and almost the entire Vitebsk Oblast in Belarus.

The hillforts of the 8th–6th century B.C. were protected only with wooden fences and had no ramparts. Ramparts and fosses started appearing since the 4th century B.C. and the process continued till the brink of the 1st millennium A.D.⁷². One of the rampart building techniques was making them of turf. Hillforts built on hilltops were usually circumvented with circular ramparts along the perimeter of the top often complemented with semi-circular ramparts at the foot; whereas, hillforts built on capes were separated from adjacent eminences with one or several lines of linear ramparts and fosses.

In the Daugava region of Belarus, about three fourths of the Dnieper-Daugava Culture hillforts were built on hilltops and only one fourth – on

⁷⁰ ЕГАРЭЙЧАНКА А. А. Халопенічы. *Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 632; ЕГОРЕЙЧЕНКО А. А. Раскопки городища у д. Холопеничи. *Древности Белоруссии и Литвы*, Минск, 1982, с. 67–71; ЛАШАНКОЎ М. І. *Городища Милоградской культуры на территории Беларуси*. Минск, 2011, с. 66–68.

⁷¹ ЛАШАНКОЎ М. І. *Гарошкаў. Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 165–166.

⁷² ШМИДТ Е. А. *Племена верхнего Днепра до образования Древнерусского государства. Днепро-двинские племена (VIII в. до н.э. III в. н.э.)*. Москва, 1992, с.



Barsuki Hillfort by the Daugava River with archaeological excavation areas marked with numbers (Vitebsk Oblast, Belarus) (ШАДЫРА В. Ранний железный век Северной Белоруссии. Минск, 1985, с. 18).

caples. It is assumed that most of the people, if not all of them, of this culture lived in hillforts until the 3rd–4th century A.D. It has been noticed that the people of this culture avoided banks of bigger rivers and preferred remote locations in the forests, by smaller rivers and lakes. Hillforts with the tops of 500 to 2,500 m² prevail in the region; however, there are several big hillforts as well. Quite often, hillforts of this culture formed groups of approximately three in the same small territory.

Belarusian archaeologist Vadzim Shadyra (*Вадзім Шадыра*) has distinguished two main types and several subtypes of the Dnieper-Daugava Culture hillforts. Hilltop hillforts are the first type. They are broken into four subtypes: A – with steepened slopes and natural barriers but without earth ramparts; B – the top encircled with one rampart; C – with one or several ramparts and fosses on the slopes; and D – with circular and additional semi-circular ramparts. The hillforts of the first type make two thirds of the Dnieper-Daugava Culture hillforts in the Northern Belarus. The cape-based hillforts represent the second type, which is broken into two subtypes: 1 – built on capes between two

almost parallel fosses or brooks having separate influxes into the main wash or water body; 2 – built on capes at the confluence of two brooks or washes. Hillforts of the second subtype usually had a perfect natural protection of the slopes. Cape-based hillforts were separated from adjacent eminences with one or several ramparts and fosses. Sometimes hillfort slopes were reinforced with ramparts, too. Besides that, there are several hillforts, which do not match any of the above-mentioned types⁷³.

The Barsuki (*Барсуки*) Hillfort (Verkhnyadzvin'ski (*Верхнядзвінскі*) District, Vitebsk Oblast, Belarus) could represent the first type. This hillfort was built on a stand-alone hill near the Daugava. In 1975–1976 and 1981, the archaeological expedition led by V. Shadyra excavated 500 m² of the hillfort in total. The hillfort top is almost round and has the size of 36x34 m. There are three up to 2 m high ramparts and fosses encircling the entire top. There used to be one more internal rampart by the edge of the top and two additional external up to 1.5 m high ramparts by the south-southeastern lobe. The excavations revealed up to 1 m thick cultural layer and remains of the defensive wall encircling the top. The hillfort was dated to the 4th century B.C. – 5th century A.D. Besides that, pieces of the Tushemlya-Bancerov Culture pottery were discovered and that implies that the people of this culture could use the hillfort as a temporary refuge in the beginning of the 3rd quarter of the 1st millennium A.D.⁷⁴.

Another well-researched hillfort of the Dnieper-Daugava Culture is located in the Kubli-chi (*Кублічы*) Village (Ushacki (*Ушацкі*) District, Vitebsk Oblast, Belarus). The hillfort was built on an oval 65x30 m large 6–8 m hill on a lake island. In 1964–1968, archaeologists led by Klimenty Shut (*Климентій Шут*, 1925–1969) excavated 736 m² of the hillfort and found a 25–35 cm thick cultural layer

⁷³ ШАДЫРА В. И. Ранний железный век Северной Белоруссии. Минск, 1985, с. 10–24.

⁷⁴ ШАДЫРА В. И. Барсуки. Археалогія і нумізматыка Беларусі: энцыклапедыя. Мінск, 1993, с. 76.

reaching 1.2 m at the edges. Along the perimeter of the top, there were 7–8 m long and about 3 m wide pole construction houses with open hearths inside. Some of them were divided into separate rooms. There were traces of 19 different houses in total on the hillfort top. Abundant artefacts were discovered as well, including potsherds, animal bones, iron knives, sickles, darning needles, fishing hooks, arrowheads, ornament fragments, axes (one iron and one stone), stone quern, and various bone, horn, and flint articles. The hillfort was dated to the 4th century B.C. – 3rd century A.D.⁷⁵.

In the middle of the 1st millennium A.D., the Tushemlya-Bancerov Culture developed on the basis of the Dnieper-Daugava one; it lasted approximately till the 8th century. The people of this culture were gradually assimilated by the Slavs, who came from the south. Presumably, some of the Balts moved westwards from the Daugava middle reaches and joined the Latgalian tribe, which formed in the eastern Latvia⁷⁶.

The Tushemlya-Bancerov Culture thrived in the 6th–8th century in the territory of modern Belarus and some part of the Russian Federation along the upper and middle reaches of the Daugava, as well as the upper reaches of the Neman and Dnieper. The culture was named after its two most famous hillforts: Tushemlya (50 km from Smolensk) and Bancerov (near Minsk). It formed in the former habitats of the Brushed Pottery Culture (partly) and the Dnieper-Daugava Culture.

In the early Middle Iron Age, unfortified settlements became dominant in the habitat of the Tushemlya-Bancerov Culture. Hillforts served as temporary refuges and sometimes as shrines.



Kubличи Hillfort on a lake island (Vitebsk Oblast, Belarus).
Photo by Ales Bautovich (radzima.org).

The people of this culture took over many of the hillforts of the earlier Brushed Pottery and Dnieper-Daugava cultures and built some new ones. The later were of two main types: hilltop-based and cape-based. The areas of their tops were 500–2,500 m². Almost all the hillforts researched were inhabited up till the Middle Iron Age, yet the cultural layer of the 2nd half of the 1st millennium A.D. was very thin in most of them, which implies that, instead of serving as permanent habitation sites, the hillforts were used rather as temporary refuges. Their fortifications built before the Middle Iron Age were extended and improved during that period. Hillfort tops were extended, additional fosses were excavated, new ramparts were raised, and slopes were steepened⁷⁷.

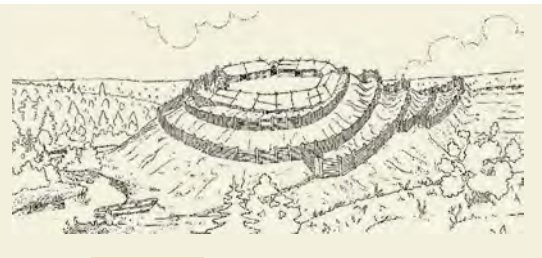
The Garadzishcha (Гарадзішча) Hillfort (Medil District, Minsk Oblast, Belarus) could be an example of such previously used yet newly fortified hillfort. The hillfort was used in the Early Iron Age, yet its inhabitants deserted in on the brink of the 3rd–4th century A.D. In the 5th–6th century, inhabitants of the nearby settlement extended the hillfort top and reinforced one side with ramparts and fosses; a new defensive wall was built as well⁷⁸.

⁷⁵ ШАДЫРА В. І. Кублічы. *Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 353; ШАДЫРО В. І. *Ранний железный век Северной Белоруссии*. Минск, 1985, с. 31–97; ШУТ К. *Городище Кубличи Ушачского района. Древности Белоруссии*, Минск, 1969, с. 262–289.

⁷⁶ ШАДЫРО В. І. *Древности балтов Белорусского Подвинья. Проблемы этногенеза и этнической истории балтов*, Вильнюс, 1985, с. 112–123.

⁷⁷ *Археалогія Беларусі*. Мінск, 1999, т. 2, с. 361–363.

⁷⁸ ЕГАРЭЙЧАНКА А. А. *Гарадзішча. Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 159; МИТРОФАНОВ А. Г. *Железный век средней Белоруссии*. Минск, 1978, с. 88–89.



Reconstruction of the Tushemlya Hillfort (Smolensk Oblast, Russian Federation) (ТРЕТЬЯКОВ П. Н.; ШМИДТ Е. А. *Древние городища Смоленщины*. Москва–Ленинград, 1963, с. 16).

Tushemlya (Тушемля) Hillfort (Pochinkovski (Починковский) District, Smolensk Oblast, Russian Federation) was built at the confluence of the Tushemlya and Sozh Rivers. The slopes are about 17–18 m high; the top is 35 m long and up to 32 m wide. In 1955–1957, it was thoroughly researched by the expedition led by Pyotr Tretyakov (Пётр Третьяков, 1909–1976). The top is surrounded with three main and three additional ramparts. They separate the hillfort from the adjacent eminence. A longhouse resting on the inner rampart encircled the top; it was divided into separate rooms. It is assumed that the longhouse had a gable roof; its external side was covered with earth or turf, which protected the building from fire. The walls of the longhouse were made from vertical poles with side cutouts holding horizontal logs. In the southwestern part of the hillfort, there was an alleged shrine with a central wooden idol surrounded with a circle of smaller ones. In the northern part of the hillfort, there was a narrow gate only 1.25 m wide. The access to the gate was complicated as the passages between the ramparts towards the gate were arranged in such a way that, after getting through one rampart with fortifications on top, one had to proceed along another rampart to reach another passage⁷⁹.

The Bancerov or Bancaroushchina (Банцарайшчына) Hillfort (Minsk District, Minsk Oblast, Belarus) was protected with two ramparts and a fosse in between on the northern and northeastern side; on the eastern side there was only one rampart. The southern slope of the hillfort going down towards the Svisloch River had no earth fortifications. The top of the hillfort was 55x35 m large. In 1926–1928, 1948–1949, and 1982, the hillfort was researched by Syargey Dubinski (Сяргей Дубінскі, 1884–1937), Aleksey Mitrafanov (Аляксей Мітрафанаў, 1912–1988), and Georgiy Shtykhaev (Георгій Штыхаў). The area of 245 m² was excavated in total. The archaeological excavations revealed that initially the hillfort was used by the Brushed Pottery Culture people⁸⁰.

The Tushemlya-Bancerov Culture people experienced two periods on intensified warfare in their habitat. The first period dated to the 5th–6th century; it should be attributed to the invasion of the Huns and probably the Avars. The proof is the three-edged arrowheads, which were widespread from the Ural Mountains to the Danube River in the 3rd quarter of the 1st millennium A.D. They were typical to these nomads of the steppes. Such arrowheads were found in abundance in the burned remains of the fortifications of the Tushemlya-Bancerov Culture hillforts. Jevgeniy Shmidt (Евгений Шмидт) correlated these finds with the attacks of the nomadic tribes; although he made a proviso that “representatives of the Tushemlya-Bancerov Culture could have learned to make such arrowheads, too”⁸¹. We consider this assumption to be wrong, because, had the Balts produced such three-edged arrowheads, they would have been found in abundance all around the habitat of the Eastern and the Dnieper Balts. Based on the finds of the three-edged arrowheads in the modern Lithuania, A. Luchtanas have stated that

⁸⁰ ШТЫХАЎ Г. В. Банцарайшчына. *Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 73.

⁸¹ ШМИДТ Е. А. Вооружение и снаряжение войнов – всадников тушемлинских племен Поднепровья. *Гістарычна-археалагічны зборнік*, Мінск, 1995, т. 6, с. 108–109.

⁷⁹ ТРЕТЬЯКОВ П. Н.; ШМИДТ Е. А. *Древние городища Смоленщины*. Москва–Ленинград, 1963, с. 42–103.

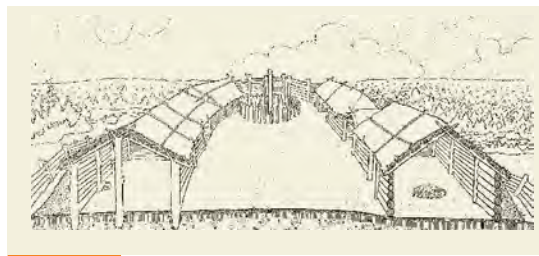
they witness the invasion of the nomadic Huns into the territories of the Balts⁸².

In the 6th–8th century, the habitat of the Tushemlya-Bancerov Culture faced an intensifying expansion of the Slavs, which came from the south. Otherwise than in the case of the nomads' invasion, when the encounters ended either with successful defence or destruction of the Baltic hillforts, military conflicts with the Slavs were not usual. Some hillforts reveal a fluent transition from the Baltic to the later Slavic cultural layers; however, traces of burning and destruction are found here and there, too. It is assumed that in some cases the Slavic newcomers settled in the neighbourhood of the Balts or even in their settlements peacefully.

The Kolochin Culture of the 5th–8th century covered parts of Belarus, Ukraine, and the outskirts of the Russian Federation. In Belarus, its habitat involved the Gomel and Mohilev Oblast, in Ukraine – most of the Chernihiv and Sumy Oblast, and in the Russian Federation – most of the Bryansk, Oryol, and Kursk Oblast.

Researchers argue about the ethnicity of the Kolochin Culture people. For instance, Valentin Sedov (*Валентин Седов*) assumed this culture to be Baltic⁸³, whereas Piotr Tretyakov (*Пётр Третьяков*) claimed it to be Slavic⁸⁴. Unfortified settlements were the dominant habitation sites of the Kolochin culture people and their houses were mostly sunken. Hillforts were few: they served as temporary refuges and territorial centers, some of them had shrines as well⁸⁵.

The Kolochin Culture accounts for several dozens of hillforts, yet only a few of them have been researched. These were the refuge-type hillforts



Reconstruction of the Tushemlya Hillfort buildings and shrine (Smolensk Oblast, Russian Federation) (ТРЕТЬЯКОВ П. Н.; ШМИДТ Е. А. *Древние городища Смоленщины*. Москва–Ленинград, 1963, с. 17).

built near bigger settlements or in-between several ones. They were well-fortified; however, they were not used permanently. The Kolochin or Kalochyn (*Калочын*) Hillfort (Gomel Oblast, Belarus), which gave the name to the culture, was researched in 1951–1960 (with breaks) by archaeologists Yuriy Kukharenska (*Юрий Кухаренка*, 1919–1980), Olga Melnikovskaya (*Вольга Мельникоўская*), and Erast Simanovich (*Эраст Сымановіч*, 1919–1983). The total area of 1,332 m² was excavated. The hillfort was built on a cape of the right bank of the Dnieper. The dimensions of the top were 42x36 m and it was separated from the adjacent eminence with two ramparts (the outer one was 1.1 m high and the inner one was 3.5 m high). The hillfort top was also circumvented with a rampart and a massive wooden wall, upon which the inner buildings rested. There was an unfortified settlement at the foot of the hillfort, too.⁸⁶

Hillforts-shrines make a separate group of the Kolochin Culture hillforts. One of these is the Zalutamino (*Залатаміно*) Hillfort (Karma (*Кармянскі*) District, Gomel Oblast, Belarus). In 1981 and 1983, it was researched by Sergey Rasadzin (*Сяргеў Расадзін*). The bigger part of the top was excavated (196 m² out of total of 228 m²). The top was circumvented with a double rampart (the outer one was 2 m high and the inner was 0.5 to 1.0 m high), yet

⁸² ЛУХТАН А. Война V века в Литве. *Гістарычна-археалагічны зборнік*, Мінск, 1997, т. 11; *Беларусь у сістэме Еўрапейскіх культурных сувязяў*, с. 15–20.

⁸³ СЕДОВ В. В. *Археологический СССР. Восточные славяне в VI–XIII вв.* Москва, 1982, с. 29–34; СЕДОВ В. В. *Днепровские балты. Проблемы этногенеза и этнической истории балтов*, Вильнюс, 1981, с. 26.

⁸⁴ ТРЕТЬЯКОВ П. Н. *Финно-угры, балты и славяне на Днепре и Волге*. Москва–Ленинград, 1966, с. 259–264.

⁸⁵ *Археологія Беларусі*. Мінск, 1999, т. 2, с. 452.

⁸⁶ ЛАШАНКОЎ М. І.; ШТЫХАЎ Г. В. *Калочын. Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 72–73.



Pots from the Bancero or Bancaroushchina Hillfort (Minsk Oblast, Belarus) (nn.by).

there were no traces of defensive walls or buildings. There was only a semi-circular pit in the center, in which shards of huge pots and postholes (assumed to be traces of wooden idols) were found. Based on the finds, some researchers claim that the hillfort was a shrine⁸⁷. However, other authors insist that the hillfort served primarily as a temporary refuge.⁸⁸ One way or another, the hillfort could have performed both functions.

In the 2nd half of the 8th century, the Kolochin Culture habitat was already inhabited by the representatives of the Slavic tribe called Radimichi,⁸⁹ and the culture went into decline.

The Moshchin Culture was spread in the upper reaches of the Oka, in the territory of the present Russian Federation. It formed in the 4th century A.D. in the habitat of the earlier Baltic culture. Now, its habitat falls into the territory of the Kaluga and Tula Oblast as well as parts of the Oryol, Smolensk, and Moscow Oblast. It was named after the Moshchin (Мошчин) Hillfort (Mosalsk (Мосальский) District, Kaluga Oblast, Russian Federation).

According to Russian archaeologist V. Sedov and some other researchers, the Moshchin Culture should be attributed to the tribe called голядь in the Slavic written sources or otherwise the Galindians.

These Galindians should not be confused with other Galindians – the Western Balts, who used to inhabit the present Olsztyn region in the north of Poland and were most often considered to be one of the Prussian tribes, or less commonly – a separate Baltic ethnos.

The tribe called “голядь” – the Galindians – was mentioned in the Hypatian Codex⁹⁰. Russian historian Vladimir Pashuto (Владимир Пашуто, 1918–1983) attributed this reference to the Galindians, who were the aim of the Prince Iziaslav's attacks to the Prussian Galindians,⁹¹ yet V. Sedov argued with this thesis and considered the Galindians of the Moscow region to be a separate tribe. On the other hand, he recognized the possibility that formation of the Moshchin Culture could have been indirectly influenced by the western Balts and explained that through the influence of the Zarubnitsy Culture, which in turn could have been influenced by the Pomeranian Culture of the western Balts.⁹² Abundant Baltic hydronyms in the upper reaches of Oka is the Baltic legacy⁹³.

The Moshchin Culture people mostly used hillforts built by the representatives of the earlier Baltic Culture of the upper reaches of Oka. Usually, these were the cape-based hillforts built at confluences of rivers or on bank capes with 2–3 steep slopes; they were separated from adjacent eminences with ramparts and fosses. The ramparts were either made of soil (sand and clay) or had a wooden frame made of logs covered with a layer of annealed clay. Some hillforts were built on stand-alone hills surrounded by marshes.

The Moshchin (Мошчин) Hillfort (Kaluga Oblast, Russian Federation) was one of the biggest hillforts of the Eastern Galindians. The archaeological culture was named after that. Its excavations

⁹⁰ Полное собрание русских летописей. Москва, 1962, т. 2, с. 339.

⁹¹ PAŠUTA V. Lietuvos valstybės susidarymas. Vilnius, 1971, p. 255.

⁹² СЕДОВ В. В. Голядь. Iš baltų kultūros istorijos, Vilnius, 2000, p. 75–78.

⁹³ ТОПОРОВ В. Н. Голядский фон ранней Москвы (О балтийском элементе в Подмоскovie). Проблемы этногенеза и этнической истории балтов, Вильнюс, 1985, с. 112–117.

⁸⁷ Археалогія Беларусі. Мінск, 1999, т. 2, с. 351–352.

⁸⁸ РАСАДЗІН С. Я. Залатаміно. Археалогія і нумізматыка Беларусі: энцыклапедыя. Мінск, 1993, с. 259.

⁸⁹ Lietuvių etnogenezė. Vilnius, 1987, p. 146.



Moshchin Culture hillfort called Lithuanian Barrow (Литовский курган) at Gatj (Oryol Oblast, Russian Federation), used till the 13th century ([wikimedia.org](https://www.wikimedia.org)).

were started already in 1888 by Nikolay Bulychev (Николай Булычев, 1852 – ca. 1919). Its top is triangular surrounded by the Popolta (Пополта) River from two sides and separated from the adjacent eminence with a 2.5 m high rampart and a fosse. By the beginning of the Middle Iron Age, an additional picket fence was built at the bottom of the fosse. On the top, dwelling houses and barns were built in parallel to the defensive wall⁹⁴.

After the rapid Slavic expansion terminated the development of two other cultures of the Dnieper Balts (the Kolochin and Tushemlia-Bancerov ones), the eastern Galingians remained a Baltic island among the Slavs although the Vyatichi tribe was gradually penetrating their lands.

Written sources also provide records of the military conflicts between the eastern Galindians and the Slavs. The Hypatian Codex states that Prince Izyaslav Jaroslavich of Kiev (Изяслав Ярославич, 1054–1068, 1069–1073, 1077–1078) conquered the Galindians in 1058. However, that was not for good, because almost a hundred years later, namely in 1147, under the order of Prince Yuri Dolgorukiy of Rostov and Suzdal (Юрий Долгорукий, 1113–1157), Svyatoslav Olgovich (Святослав Ольгович, 1146–1157) organized a new campaign against the

Galindians near the Protva River and took them under his control. Incidentally, Moscow established at the eastern outskirts of the Galindian habitat was first mentioned the same year, that is in 1147⁹⁵.

Presently, the most eastern hillforts of the Dnieper Balts remind of the times when the habitat of the Balts used to be huge and stretched almost to the modern Moscow. In the middle and the 2nd half of the 1st millennium A.D., migration radically changed the entire ethnical map of the region. Sometimes, the Slavic expansion into the Baltic habitat provoked military conflicts, which are witnessed by the traces of the fights and layers of charcoal at some of the hillforts. On the other hand, many Baltic and Slavic communities coexisted peacefully side by side to each other and eventually merged in common settlements. The newcomers picked the ancient hydronyms and some of the toponyms, as well as various cultural elements. As archaeologist Ilona Vaškevičiūtė has rightfully admitted, “Baltic hydronyms and toponyms could probably preserve only in the result of cohabitations, otherwise the newcomers would not have had the sources to pick the names of rivers or other locations”⁹⁶. The Dnieper Balts were gradually assimilated by the more numerous Slavs, yet the Baltic hydronyms and toponyms survived and so did the archaeological monuments witnessing that the Balts used to live in these lands for many ages.

⁹⁴ ПАСАДЗІН С. Я. Залатаміно. *Археалогія і нумізматыка Беларусі: энцыклапедыя*. Мінск, 1993, с. 259.

⁹⁵ *Lietuvių etnogenezė*. Vilnius, 1987, p. 147.

⁹⁶ VAŠKEVIČIŪTĖ I. Baltai slavų apsuptyje. *Istorija*. Vilnius, 2007, t. 65, p. 9.

Hillforts of the Baltic Tribes: Different Histories

The true Iron Age came to the Eastern Baltic only after the local inhabitants learned to smelt iron from local bog ore. This happened approximately in the 1st century A.D. and since then the Baltic tribes thrived up till the 12th or 13th century when the state development began. During this period, several dozens of tribal cultures emerged, blossomed, and went into decline. Each of them featured a different form of the ancient Baltic legacy. These differences were explicitly manifested in the burials; in the settlements, research of which started only in the recent decades, individual features of different tribes have not been distinguished yet. This historical period of the ancient Balts can be broken into two long periods with the threshold of the mid-1st millennium A.D. Till then, the ancient Balts were anonymous; they were called after archaeological cultures. Their cognition is based on the research of barrows and burial grounds. In Lithuania and Latvia, they are named considering distinctive features of these burial monuments, whereas in Poland and the Kaliningrad Oblast of the modern Russian Federation, the names have been given after the locations of the typical burial monuments of the ancient Baltic cultures. As for the present, several dozens of the undoubted Baltic cultures have been distinguished. The Southern Latvia and the Northern Lithuania featured the Barrow Culture, the Lithuanian and Latvian south-western coast – the Western

Lithuanian Burial Ground Culture, the Neman and Nevėžis lower reaches – the Central Lithuanian Burial Ground Culture, the Jūra lower reaches – the Neman Lower Reaches Burial Ground Culture, the basin of the Pregolya and the Sambian Peninsular – the Sambian-Natangian Culture, the Masurian Lake District – the Bogaczewo Culture, etc. Contemporary written sources, scarce as they are, provide some names of the Baltic tribes (the Sudovians and the Galindians) identified with specific archaeological cultures (for instance, the Galindians are identified with the Bogaczewo Culture). Opinions on the ethnical identity of the peripheral cultures of the region (i.e., Welbark Culture) vary. Baltic hillforts of this period are poorly researched, because their number drops considerably compared to the earlier period; besides, not all of the researched ones feature the cultural layer of that period. Material artefacts found at hillforts (mostly potsherds, animal bones and production waste) and burial monuments (ornaments, working tools, and weaponry) are very different, which makes hillfort dating only approximate and gives no clues for their attribution to a specific culture.

The so called mini-hillforts are sort of exclusion among the Baltic hillforts of the 1st millennium A.D. Although their tribal attribution is not clear and their dating is only approximate, the territory of their proliferation – namely, the Neman

middle reaches – is well defined. Approximately 30 mini-hillforts were found there⁹⁷. Tiny tops not exceeding the area of 200 m² are their distinctive feature; some of them are only a few meters in diameter. These mini-tops are circumvented with massive ramparts. Sometimes, their height reaches 6.5 m counting from the top itself. Usually, mini-hillforts have large foot settlements featuring rusticated pottery which implies that they should be dated to the 1st half of the 1st millennium A.D.

Among the mini-hillforts, the Migonys Hillfort (Kaišiadorys District, Lithuania) is the best researched. It was built on a cape of the Kruonė Brook bank. The 16x9.5 m large rounded top is separated from the eminence with a semi-circular 13 m wide rampart rising up 4 m from the hillfort top; the external slope of the rampart is 8 m high and it goes down into a 25 m wide and 25 m deep fosse. The slopes of the hillfort are very steep: their incline angle is 75° and they are about 11–16 m high. Initially, they were paved with up to 40 cm large stones which were taken out in the middle of the 20th century (it was said that there were 100 wagons of those stones). There used to be a foot settlement all around the hillfort.

In 1954–1955, the hillfort was researched by R. Kulikauskienė⁹⁸. The whole top was excavated, and the profiles of the rampart at its highest point and the southern slope were made. In total, the excavations covered 180 m², which allowed a rather good understanding of the mini-hillfort. The top had an up to 2.8 m thick cultural layer which was broken into 10 different horizons. It is interesting that the cultural layer was the thickest in the top centre, although usually it is vice versa. The finds were few and that impeded the precise dating. It looks like



Migonys Hillfort (Lithuania), 2003.
Photo by Gintautas Zabiela.

the level of the top was raised with every reconstruction bringing the soil from the adjacent settlement, because at the depth of 40 cm rusticated potsherds were found along with the brushed ones and fragments of a ceramic crucible, which is not typical feature of the Iron Age hillforts.

Four stages of the hillfort construction have been identified. The first rampart was 1.2 m high and 5 m wide; it had a wooden fence on the top which was found burnt. Later the rampart was raised up to 2 m and widened to 7 m at the basis by piling on sand and reinforcing it with clay. A wooden wall was also built on the top of the newly formed rampart. It was made of 2 m long and 24 cm thick logs; the clearances between them were filled in with clay daub and small stones. The wall was about 85 cm thick. It was burned too. Most probably, it resulted from an attack, because 50 cm outside the wall a narrow-blade socketed iron axe was discovered. The charcoal found at the edge of the top could have come from the same burned wall. The wall was built of up to 1.45 m high and 13 cm thick poles. After the fire, the rampart was raised up to 3 m and widened to 11 m by putting on a new layer of clay. It circumvented the entire top. A new 2.5–3 m thick wooden wall was built closer to its internal slope. It was constructed of 1.7 m long and 20 cm thick logs, burned remains of which formed

⁹⁷ ZABIELA G. *Lietuvos medinės pilys*. Vilnius, 1995, p. 170; VOLKAITE-KULIKAUSKIENE R. Miniatiūrinių piliakalnių Lietuvoje klausimu. *Iš lietuvių kultūros istorijos*. Vilnius, 1959, t. II, p. 125–137.

⁹⁸ VOLKAITE-KULIKAUSKIENE R. Migonij (Jiezno raj.) archeologiniai paminklai. *Iš lietuvių kultūros istorijos*. Vilnius, 1958, t. I, p. 44–52.



Baltic tribes in beginning of 2nd millennium and hillforts, mentioned in the text:

- 1 – Antatiličiai (Lithuania); 2 – Apuolė (Lithuania);
- 3 – Asote (Latvia); 4 – Craam (Grachyovka) (Kaliningrad Oblast, Russian Federation); 5 – Kaukai (Lithuania);
- 6 – Kunigiškiai (Lithuania); 7 – Migonys (Lithuania);
- 8 – Opstainiai (Lithuania); 9 – Stupeļi (Latvia);
- 10 – Tērvete (Latvia); 11 – Vaitiekūnai (Lithuania);
- 12 – Vedriai (Lithuania). Drawing by Edita Namajūnienė.

a 25 cm thick layer of charcoal. The wall was reinforced with stones. Later the rampart was raised to its present height and paved with stones.

Results of the excavations implied that initially the hillfort was used as a dwelling place but later it turned into a temporary refuge, as the fortifications were expanded and the top shrunk. The discovered artefacts which could be used for dating were attributed to the 4th and 5th centuries A.D. However, they were found at the upper layers of the rampart along with brushed pots, which reveals earlier stages of the settlement existence, rather than chronology of the later layers.

Approximately from the 4th century A.D., the Baltic cultures distinguished on the basis of the burial practices can be identified with the Baltic tribes

known from the 12th–14th century written sources. The modern Lithuanian and western Latvian coast (except the northern part of the Curonian peninsula) was inhabited by the Curonians who featured the expansion into Samogitia since the early 2nd millennium A.D. The plains of the Northern Lithuania and the Southern Latvia were the Semigallian lands, the Northeastern Lithuania and Southeastern Latvia southwards from the Daugava River were inhabited by the Selonians, and the Eastern Latvia eastwards from the Daugava River – by the Latgalians. The Eastern Lithuania and the Northwestern Belarus was a habitat of the Lithuanian tribe which later established the Lithuanian State, and the Southern Lithuania, the Neman Region of Belarus and the Northeastern Poland were a territory of the Yotvingians (historical sources provide several names of this tribe). According to the researchers, the Mid-Lithuania was inhabited by the Aukshtaitians (the Upland Lithuanians), and the Samogitian Highland – by the Samogitians (the Lowland Lithuanians). Both banks of the lower reaches of the Neman River were the Scalovian habitat, and the upper reaches of the Pregolya River and Šešupė River – the Nadroviai one. There were numerous Prussian tribes inhabiting the modern Kaliningrad Oblast of the Russian Federation and the Northeastern Poland: the Sambians inhabited the Sambian Peninsula, the Natangians – the territory southwards from the Pregolya, the Warmians – the shore of the Vistula Lagoon, the Bartans – the Masurian Lake District, the Galindians – the upper reaches of the Narew, etc.

The Curonian hillforts are the best researched compared to the ones of other Baltic tribes, because they have undergone extensive excavations both in Lithuania and Latvia. There are about 120 known Curonian hillforts in total. Usually, they feature rather large rounded or oval tops (60–80 m in diameter) circumvented with massive 5–10 m high ramparts sometimes equipped with additional fore-works. The cultural layers implied that the hillforts had been inhabited intensively since the late 1st millennium



Apuolė Hillfort (Lithuania), aerial view, 2011.
Photo by Gintautas Zabiela.

A.D. Since then, a lot of reconstructions appeared at the profiles of the ramparts; usually, they took place after previous wooden fortifications were burned. This should have been the consequence of military encounters with the Scandinavians (some of them were recorded in the written sources too). The hillforts were surrounded by large foot settlements (up to 6 ha); cremation places were also found nearby.

The Curonian castle of Apuolė is the oldest Baltic castle; its name reported in the written sources along with the relevant military actions has survived till nowadays. According to Rimbert, the archbishop of Bremen, the Apuolė Castle was attacked by the Swedish Vikings in 853. After an 8-day-long siege, the Curonians were forced to surrender; they paid a ransom – half pound of silver (about 180 g) per person and provided 30 hostages.

The Apuolė Hillfort was identified as a location of the castle in 1887 by Eduardas Volteris (1856–1941) and Julius Döring (1818–1898). The hillfort

was built on an eminence cape at the confluence of the Luoba and Brukis brooks. The surviving top has a form of an irregular rectangular; it is 100x80 m large and surrounded with an 8 m high rampart which is 38 m wide at the basis in the east. Gradually getting lower, it used to circumvent the entire top. The southern section of the rampart is the best preserved: here, it is 1.5 m high and 6 m wide. The northern section of the rampart was washed off along with the edge of the levelled top. The entrance was at the south-eastern corner of the yard. The hillfort was reinforced with an additional fore-work on the side of the eminence; on the sides of the brooks, protection was provided by steep 9–10 m high slopes.

In 1928–1932, the hillfort was excavated by three researchers: the top – by the abovementioned E. Volteris in 1928–1930 and Swedish archaeologist Birger Nerman (1888–1971) in 1931; the ramparts – by Vladas Nagevičius (1881–1954) in



Apuolė Hillfort well (Lithuania), 1931
(*Apuolė. Ausgrabungen und Funde 1928–1932*.
Klaipėda, 2009, p. 149 Abb. 91).

1931–1932. In five years, the total area of 1,561 m² was excavated: 3 rampart profiles were made and the top was excavated at 4 spots⁹⁹. As the excavations were performed digging long and narrow trenches, no explicit building features or their dimensions were identified; it was only established that the top was irregularly covered with buildings. The layer of the 1st half of the 1st millennium A.D. revealed features of a 2.5 m wide and 1.8 m high buildings resting on the main rampart; their internal wall was made of planks reinforced with poles; the roof was plank-covered too. In the middle of the 1st millennium A.D., there were drop-log construction buildings at that spot. An up to 50 cm thick cultural layer containing various iron items (socketed and hafted spearheads, knives, awls, strike-irons,

pins, spurs, bridles, and an axe fragment), bronze ornaments (pins, spirals, a bracelet fragment, and a penannular fibula), stone tools (touchstones and spindles), and ceramics (loom weights, fishing net weights, as well as even, rusticated, and wheel-made potsherds). Besides that, there were an amber spindle, burned grain, and animal bones.

The ramparts of Apuolė featured four reconstruction stages; the first two ones belonged to the period during which the presence of the Curonian legacy was questioned by some archaeologists. The initial rampart was made of loam in the first centuries A.D. Its eastern section was 1.5 m high and 6 m wide. The loam for the rampart was taken from a 2 m deep and 14 m wide ditch excavated on the external side. The rampart circumvented the entire top; it was 1 m high and 4 m wide. In the south-eastern section, there was a 3.5 m wide entrance with a gate

⁹⁹ *Apuolė. Ausgrabungen und Funde 1928–1932*. Klaipėda, 2009, p. 17–68, 133–209.



Incēni Hillfort rampart (Latvia), 2011.
Photo by Gintautas Zabiela.

resting on 4 poles by the edges of the rampart. On the top of the rampart and along its internal edge, there was a barrier made of 20–30 cm thick poles; its external side was reinforced with up to 15 cm large stones.

In the 5th century A.D., the first fortifications of Apulē were burned and reconstructed afterwards. The eastern rampart was raised up to 1.7 m and widened to 12 m at the base by putting a layer of sandy loam on top of the initial rampart. The gateway was reinforced with up to 1 m large stones which secured the poles. The road was paved with smaller stones.

In the 7th century, the fortifications burned again. After the fire, the eastern rampart was reinforced even more: there were several layers of loam and each of them was annealed to ensure stability. The external slope was made almost vertical; it was made of 17–70 cm thick logs tied to the soil

of the rampart with 50–80 cm long and 6 cm thick trimmed oak pegs or their own branches which were left uncut. The reinforced rampart was up to 8 m high and 15 m wide. As its external slope went into the fosse, the total external height of the barrier was up to 10 m and made an impression of a mighty wooden stronghold. This was the stronghold attacked by the Vikings in 853: 70 Scandinavian-type arrowheads found in the rampart were evidences of that attack. Later, the wooden barrier was destroyed or decayed and fell into the fosse.

In the 13th century, the rampart was raised and acquired its present look. The external fosse was filled with grey sandy loam which formed a 4 m layer. The top of the rampart was paved with stones. Presumably, there was a crib-work wall as well. During this period, a wooden well (water reservoir) was constructed in the yard as well. The well chamber



Mežotne Hillfort rampart fortifications (Latvia)
(ĢINTERS V. *Senā Mežotne. Senatne un māksla*. Rīgā, 1939,
t. IV, p. 32 16. att.).

was 4.5x4 m large and 2 m high; it was built of 12–20 cm thick birch and ash logs. The well was kept up well: only two wooden items, namely, a turner and a ladle, were found at the bottom.

The Semigallians had few hillforts due to a plain landscape of their habitat. Moreover, after their hillforts were deserted, they were often used to mine gravel; others were turned into cemeteries or damaged by rivers. The most important Semigallian hillforts (Tērvete, Mežotne, and Incēnī) are located in Latvia. Lithuania host the place of Sidabrē, the last Semigallian castle, which was built on the Kalnelis Hillfort westwards from Joniškis. In the 16th century, a church was built there and a cemetery developed; therefore, this castle site cannot tell much to archaeologists. The Semigallians deserted Sidabrē in the winter of 1290 and fled to Lithuania. It was the last castle of the Baltic tribes mentioned in the written sources.

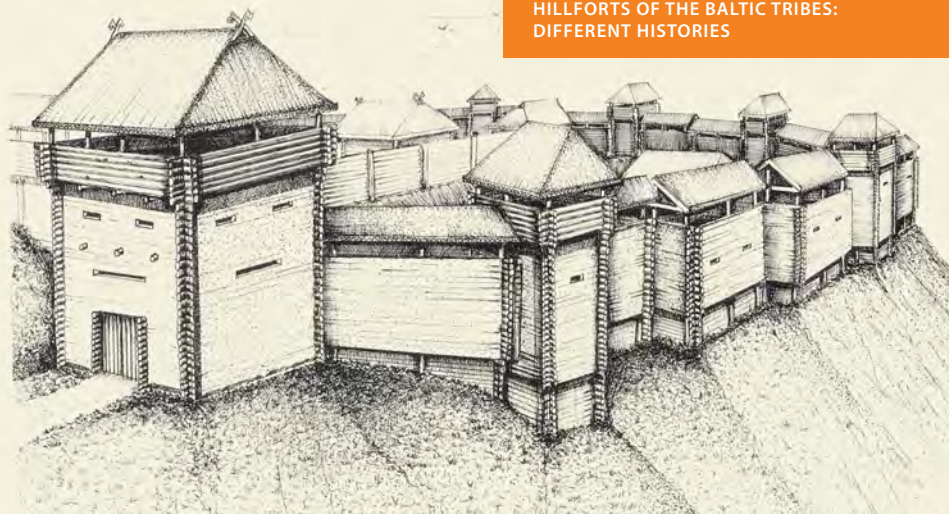
As for the present, we know 35 Semigallian hillforts; 11 of them have been researched. Their external outlook is a bit similar to the Curonian ones, but the tops are smaller, usually up to 1,000 m². They are surrounded with high semi-circular ramparts that

show that the Semigallians paid a lot of attention to their wooden castles. The rampart of Mežotne was raised from initial 3.5 m (ca. 800 A.D.) to 8 m in the 13th century in 9 reconstruction stages.¹⁰⁰ After each reconstruction, a wooden crib-work wall was built on top. The Semigallian hillfort tops feature an intensive cultural layer with abundant finds dating to the 9th–13th century. Some of them are relevant to crafts and trade which implies that the Semigallian hillforts were also crafts and trade centres. The tops were thickly covered with wooden buildings and continuously extended towards the edges which were reinforced adding soil and crib-work constructions at some spots. The Semigallian castles suffered numerous attacks and therefore there were many features of fires and reconstructions of the ramparts; arrowheads were found there too. Hillforts of the southern Semigallia were smaller and less fortified. This part of the country was more distanced from the trade routes and external threats too. The Semigallian hillforts had large foot settlements (the settlement of Mežotne covered up to 13 ha).¹⁰¹ Cemeteries with inhumation burials (or cremations of the 12th–13th century) used to be in their vicinity too they are well known.

The Tērvete Hillfort (Tērvete Municipality, Latvia), which is also called Cukurkalnis, reveals the specifics of the Semigallian hillforts the best way. The hillfort was built on a cape of the Tērvete Brook bank. The top is triangular, 50x35 m large. It is separated from the eminence with a 8 m high rampart and a 5 m deep fosse. Its slopes are 17–19 m high and steep. On the eastern slope, about 2 m below the top, there is a 8 m wide terrace. In the 13th century, the castle was reinforced with a fore-work built eastwards from the fosse; its top was 2,900 m² large and it was separated from the eminence with a rampart too. In 1866 and 1892, the hillfort was researched by August Bielenstein (1826–1907),

¹⁰⁰ *Latvijas PSR arheoloģija*. Rīga, 1974, p. 204–205.

¹⁰¹ *Zemgali senatnē – Žiemgālija senovėje*. Rīga, 2003, p. 41.



in 1954–1960 – by Emīlija Brīvkalne (1909–1984), and in 1960 – by Francis Zagorskis (1929–1986)¹⁰². The northern half of the top (977 m² in total) was excavated. The cultural layer discovered had 6 horizons (the two lowest ones were earlier than the 5th century A.D.); it total it was up to 7.5 m thick. The cultural layer revealed 15 construction phases and 3,966 individual finds (including 199 fibulas¹⁰³) apart from iron nails and potsherds. Most of the research materials remain unpublished.

The hillfort hosted Tērvete – the strongest wooden castle in Semigallia of the 12th and the 13th centuries. After the Teutonic Knights of Livonia built the Heiligenberg castle nearby in 1285, Tērvete was blocked and therefore deserted in 1286. There were wooden crib-work houses built along the edge of the top and on the terrace. 10 of them were found in total. Dimensions of the better-preserved ones were 3.4x2.5 m, 3.6x2.7 m, 4.3x3.7 m, and 6.5x4.3 m. Two houses had dome-shaped ovens, their walls were daubed with clay and there was a painting of a flutist on one of the walls. Other buildings were non-dwelling ones: there was a barn and a milling

Tērvete Castle in the 12th–13th century (Latvia)
(JERUMS N. Tērvetes pilskalna aizsardzības konstrukcijas un ziemeļu terases apbūve. *Arheoloģija un etnogrāfija*. Rīga, 2014, t. XXVIII, p. 79 12. att.).

house, as well several smokehouses and craftsmen shops. Abundant finds implied that there were nonferrous metal smelting, stone spindle and glass bead production, bone carving, and carpentry shops, as well as a smithy.¹⁰⁴ There was a well at the hillfort too¹⁰⁵.

The top was circumvented with a wooden crib-work wall reinforced with poles. Another defence line was at the edge of the terrace. The terrace was formed around 1000 A.D. Its initial barrier consisted of two parallel walls built approximately 3 m from each other. The clearance between them was filled with clay and stones. During the excavations, 5 or 6 log layers of this wall were discovered. The total height of the section was up to 80 cm. The wall was not even. The cultural layer of the late 12th – early 13th century revealed a 2.3x1.7 m large stone basement on the top near the rampart: it was assumed to be

¹⁰² *Žiemgaliai*. Vilnius, 2005, p. 235.

¹⁰³ BRĪVKALNE E. Tērvetes saktas. *Arheoloģija un etnogrāfija*. Rīga, 1974, t. XI, p. 121.

¹⁰⁴ BRĪVKALNE E. Daži amatniecības darinājumi Tērvetes pilskalnā. *Arheoloģija un etnogrāfija*. Rīga, 1964, t. VI, p. 85–104.

¹⁰⁵ *Zemgali senatnē – Žiemgaliai senovėje*. Rīga, 2003, p. 45–47.



Stupeļi Hillfort (Latvia), aerial view.
Photo by Juris Urtāns (URTĀNS J. *Augšzemes pilskalni*. Rīgā, 2006, p. 66).

the tower basement. Its walls were 45–60 cm thick and the surviving section was up to 55 cm high. The total height of the tower could have been up to 8 m. Constructions of the 13th century already used iron nails (300 of them were found) which revealed the Teutonic influence on the Semigallian constructions.¹⁰⁶ The rampart of the hillfort has not been researched yet.

The Selonian hillforts were researched rather poorly. In the 6th–12th century, Selonia had very few inhabitants and therefore hillforts were also few. The Selonian hillforts have typical archaic features. They remind of the Brushed Pottery Culture hillforts (and the bottom layers of most of the Selonian hillforts come from that period). Usually, they were built on hilltops circumvented with 1 to 3 rows of ramparts and fosses on the slopes. The fortifications were not strong; the ramparts were only up to 2 m high. They were reinforced with stones and logs. Based on the scarce excavation data, it was assumed that most of the hillforts went into decay already in the late 1st millennium A.D., namely, in the 8th and 9th centuries. Out of all researched Selonian hillforts, only four of them featured artefacts of the

early 2nd millennium A.D. At that time, the Selonian hillforts served more like temporary community refuges, because people lived at foot settlements which were up to 3 ha large. No cemeteries have been found in the vicinities.

The Stupeļi Hillfort (Jēkabpils District, Latvia) could serve as an example of a typical Selonian hillfort. It was built on a large stand-alone hill; the dimensions of its top are 85x55 m and the central part is elevated. The slopes of the hillfort are up to 30 m high; their upper parts are steepened. 6 m below the top, there is a terrace and below that, on the southern slope, there is another one. The hillfort is surrounded with a foot settlement covering 3 ha.¹⁰⁷

In 1968, J. Grauduonis excavated 6.5 m² on the hillfort; in 1977–1978, Ādolfs Stubavs (1913–1986) researched an area of 160 m². Excavations were performed at two different spots: at the north-eastern and the southern edge of the top. The cultural layer was up to 2.2 m thick at the edges. 3 upper horizons dated to the 10th–12th century. The top was circumvented with a wooden wall reinforced with stones. Within, there were some perpendicular wooden constructions. Locations of densely built crib-work dwelling houses were featured by open-type and stone hearths as well as ovens. The cultural layers contained wheel-made and hand-made rusticated pottery sherds, socketed arrowheads, bronze bracelets, penannular fibulas, spiral rings, pendants, glass and amber beads, cowry seashells, crucible fragments, and a spearhead. There also was a rare hoard of two twisted silver ingots¹⁰⁸.

The territory of Latgala accounts for about 90 hillforts dating to the Late Iron Age (the 10th–12th

¹⁰⁷ URTĀNS J. *Augšzemes pilskalni*. Rīga, 2006, p. 65–69.

¹⁰⁸ STUBAVS A. Izrakumi Stupeļu pilskalnā un senpilsētā 1977 gada. *Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu 1977. gada pētījumu rezultātiem*. Rīga, 1978, p. 62–63; STUBAVS A. Stupeļu arheoloģiskās ekspedīcijas darbs 1978 gada. *Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu 1978. gada pētījumu rezultātiem*. Rīga, 1979, p. 70–71.

¹⁰⁶ JĒRUMS N. Tērvetes pilskalna aizsardzības konstrukcijas un ziemeļu terases apbūve. *Arheoloģija un etnogrāfija*. Rīga, 2014, t. XXVIII, p. 62–83.

century).¹⁰⁹ Typically, they have large tops covering the area of up to 2.3 ha (Oļiņkalns, Aizkraukle Municipality). The tops of Latgalian hillforts were mostly oval and circumvented with up to 2 m high ramparts; higher ramparts were rare. Latgalian hillforts, especially those on the right bank of the Daugava, are well researched. In the early 2nd millennium A.D., Latgala was under the Principality of Polotsk, thus Latgalian hillforts and especially their fortifications feature influence of the eastern Slavs. In fact, larger Latgalian hillforts were fortified towns, but those who did not fit in settled at the foot. The inhabitants were buried at nearby cemeteries.

The Asote Hillfort (Jēkabpils District, Latvia) can serve as an example of a Latgalian hillfort. It was built on the right bank of the Daugava, on a cape of the valley formed by the Asote Brook. The hillfort top is 67.5x55 m large; a 2 m high rampart and a fosse separate it from the eminence. Nearby, there is a 1.5 ha large foot settlement and a cemetery. In 1949–1954, Elvīra Šnore (1905–1996) excavated 792 m² – about a quarter of the hillfort top and made a 10 m long profile trench in the northwest-southeast direction (including the rampart); searching for the gateway she also excavated an additional section of 112 m² in the northern part of the top.¹¹⁰ The excavations revealed that the hillfort had a very thick cultural layer (4.5 to 6 m) which was broken into 16 horizons. 4 horizons at the bottom belonged to the Brushed Pottery Culture, 2 upper ones – to the Order of the Livonian Brothers of the Sword, because the Asote Castle went to that when the Latgalian lands were divided between the Order and the Bishop of Riga in 1211. The Asote Hillfort was abandoned till the 9th century. Since then till the 13th century, it was inhabited permanently. The most intensive cultural layer belonged to this period. Breaking into horizons was easier because the

hillfort suffered frequent fires: there were at least 14 of them. Remains of burned wooden constructions were preserved rather well.

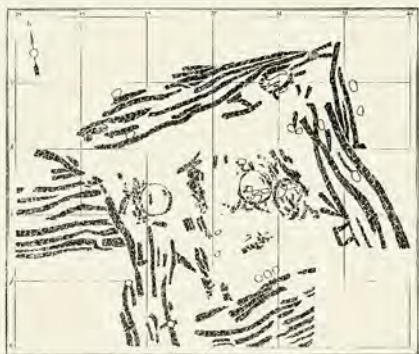
The cultural layer horizon dating to the 9th century revealed the oldest house on the hillfort. It was a 5x4.3 m large crib-work dwelling house with an oven and a porch. The house stood near the edge of the top. After the rampart was built, the houses were moved closer to the centre of the top and it was densely covered with buildings already in the 11th century. These buildings were rather small: 6x5 m; 5x4 m; 4.5x4.5 m; and 4x3.5 m. Their locations were mostly featured by the remains of round clay ovens (in total, 73 of them were found). They imply a rather dense coverage of the top. As for more interesting buildings, there was an oval 4x3 m large shed with wickerwork walls. The finds (iron slag and charcoal on the floor) imply that this was a smithy.

The inhabitants of the Asote Hillfort were mostly involved in agriculture and husbandry. Barley and rye were the dominant grain. Among the livestock, pigs prevailed. As for the wild animals, moose were hunted for meat and martens for fur. Chicken were bred at least since the 11th century. The hillfort top also featured traces of non-ferrous metals processing and pottery.

The earliest fortifications of the hillforts were walls built of logs (the logs were up to 8 m long). Later, a double wooden wall was built (the clearance between two walls was 2 m); it had a 4.5 m wide tower which protruded 3 m from the wall. After this wall burned, next one was built. Its width was almost double (3.5 m). In the 11th century, it was replaced with a rampart with a timber frame. The frame consisted of 2x2 m large chambers connected with narrow 0.5 m wide intermediate chambers. Its 3 m thick external section was filled with clay; the 2 m deep internal section was used as housing. Relatively well-preserved remains of a wooden tower were discovered in the cultural layer of the 11th century. This was a 4x4 m large tower protruding 2 m from the wall. Its external wall was

¹⁰⁹ *Latvijas PSR arheoloģija*. Rīga, 1974, p. 217.

¹¹⁰ ШНОРЕ Э. Д. Асотское городище. *Материалы и исследования по археологии Латвийской ССР*, Рига, 1961, т. II, с. 1–168.



Remains of the Asote Hillfort tower and defensive wall (Latvia) (ШНОРЕ Э. Д. Асотское городище, *Материалы и исследования по археологии Латвийской ССР*, т. II. Рига, 1961, с. 26 рис. 32).



Remains of the Asote Hillfort tower with baskets (Latvia) (ШНОРЕ Э. Д. Асотское городище, *Материалы и исследования по археологии Латвийской ССР*, т. II. Рига, 1961, с. 86 рис. 116).

reinforced with large stones (40–60 cm in diameter). 9 to 14 log layers of the tower were found. The tower was daubed with clay. Interestingly, four linden baskets with birch bark bottoms were found at the basis of the tower.

The research of the Asote Hillfort provided abundant and versatile data on the culture of the Baltic tribes in the 10th–12th century. Apart of the abovementioned features of buildings and fortifications, 4,043 specific finds, about 61,000 potsherds and 10,641 bones were collected. This impressive material is to be subject to many future studies.

The Lithuanians – the tribe that have given their name for the state – are mostly known from their burial monuments – barrows. Hillforts and settlements are rarely found in the Lithuanian habitat and the known ones are poorly researched. However, the known Lithuanian hillforts were well fortified. Most of them were built on hilltops; their tops most likely were rectangular and rather small (up to 250 m²); they were protected with one or several smaller ramparts. They might be interpreted as castles of emerging nobility. Such hillforts had large foot settlements covering the area of up to 6 ha. Some of the Lithuanian hillforts have larger tops protected with semi-circular ramparts and fosses. These should have been the territorial defence centres.

The Lithuanian hillforts are poorly researched both in Lithuania and in the north-western outskirts of Belarus.¹¹¹ Probably, most of the data on their development was derived from the excavations of the remnants of the Antatiličiai 2nd Hillfort (Ukmergė District, Lithuania) performed by G. Zabiela in 1987 and 1993¹¹². This hillfort was built on an eminence cape at the confluence of the Siesartis and the Žydaupis Brooks. Its top was triangular,

¹¹¹ ЗБЕРУГО Я. Г. Верхнее Понеманье в IX–XIII вв. Минск, 1989, с. 57–61.

¹¹² ZABIELA G. Antatiličių antrojo piliakalnio tyrinėjimai 1987 m. *Eskizai* (Ukmergė), 2002, nr. 2, p. 5–14; ZABIELA G. Antatiličių piliakalnio tyrinėjimai 1993 metais. *Archeologiniai tyrinėjimai Lietuvoje 1992 ir 1993 metais*, Vilnius, 1994, p. 84–89.

approximately 30 m long and 15 m wide; its western part was washed off by the Siesartis forming a curve by the hillfort in 1930s. The fortifications on the western edge of the top consisting of two rows of ramparts and fosses survived. The first rampart was 2.5 m high and 12 m wide; it was partly washed off before the start of the excavations. Then there was a 10 m wide and 2.5 m deep fosse (3 m wide at the bottom) and the second 3.3 m high and 12.5 m wide semi-circular rampart; its external slope went down into the second 8 m wide and 1.3 m deep fosse. The hillfort slopes were steep, 12 m high. The hillfort had a 3 ha large foot settlement with the cultural layer of the 2nd half of the 1st millennium A.D. which contained potsherds with rusticated and smooth surface.

During the excavations, the remains of the first rampart were examined thoroughly and the profiles of the second rampart and the fosses were made; the total area of 220.3 m² was excavated. The profiles revealed the 4 main stages of the Antatiličiai Hillfort habitation development. The bottom cultural layer was dominated by the Brushed Pottery Culture which is a rather common feature of the later Lithuanian hillforts. The fortifications of the middle of the 1st millennium A.D. consisted of 0.75 m high and 3 m wide rampart. In the 2nd half of the 1st millennium A.D., two ramparts were built of clay and fosses were excavated on the external side of each of them. The rampart on the edge of the top was 1.2 m high and 8 m wide; its surface was annealed. The rampart behind the first fosse was 1.4 m high and 4.5 m wide. Both ramparts had wooden barriers on top. In the early 2nd millennium A.D. the first rampart was raised to 2.2 m and widened to 10 m, while the second one was raised to 2.2 m and widened to 7.5 m. The first rampart was equipped with an allegedly double wooden wall; the clearance was filled with clay (an up to 90 cm thick layer of the clay daub survived at the internal side of the rampart). The second rampart had a wooden barrier built of 12 cm thick logs. Later the fortifications underwent



Antatiličiai, 2nd Hillfort (Lithuania), layers of the second rampart. Photo by Gintautas Zabiela.

another reconstruction and acquired their present shape. The ramparts were raised and widened (especially the second one), adding new layers of clay; the fosse between the ramparts was deepened; the initial fosse outside the second rampart was levelled and a new one was excavated.

As none of the Lithuanian hillforts has been researched thoroughly, it is impossible to say anything about the number of buildings on the top.

Archaeologists apply the name of the Aukshtaitians to the tribe which inhabited mid-Lithuania and left a unique culture of human cremation and horse inhumation graves. As their habitat stretched on a rather plain landscape, the so called Aukshtaitian tribe left few hillforts. Most of them were built on river bank capes. Their tops were medium-sized, from 400 to 1,000 m² mostly. However, some of the tops were less than 100 m². From the side of the eminences, the



Vaitiekūnai Hillfort (Lithuania), 2017.
Photo by Gintautas Zabiela.

tops were protected with massive ramparts up to 6 m high. If a hillfort was built on stand-alone hill, the ramparts circumvented the entire top.

The Aukshtaitian hillforts are poorly researched. Excavations of the Vaitiekūnai Hillfort (Radviliškis District, Lithuania) were the most extensive, but, otherwise than in case of the Antatilčiai Hillfort, the rampart has not been examined. The hillfort was built on a cape at the confluence of the Šušvė River and the Vingrys Brook. The top is triangular, 36 m long and 17 m wide in the southern part. Here, a 4.5 m high rampart was raised; its external 7 m high slope goes down into an 8 m wide and 2.35 m deep fosse.

In 1977–1978, Algimantas Merkevičius (1933–2014) examined the entire top of the hillfort and made a profile of the fosse. The total area of 353 m² was excavated. The top had a 0.3 m to 2.4 m thick cultural layer including horizons of two different periods.¹¹³ The most important finds were the rem-

nants of 6 wooden buildings found at the upper horizon dating to the early 2nd millennium A.D. The buildings were burned and therefore their features were more visible. They were small – only 2x2 to 2x3 m; they stood closer to the edge of the top and therefore most probably those were chambers of a longhouse resting on the rampart. The floor of one of the chambers was paved with stones. Very few finds were discovered at the hillfort: 2 iron knives, 2 awls, bronze jewellery (a penannular fibula, a pendant, and a ring), a bone fitting, 4 touchstones, a ceramic crucible fragment, a moose horn with processing features, a piece of iron slag, and about 400 sherds of wheel-made and hand-made pottery with smooth surface.

The research implies that the wooden castle at the Vaitiekūnai Hillfort was used not for permanent dwelling, but only as a temporary refuge, and the attention was focused on strengthening the fortifications, especially the ramparts.

The Samogitian hillforts have been researched even less. Their external outlook is similar to the Aukshtaitian ones, but most of them are built on stand-alone hills; the tops are reinforced with ramparts. Many of those hillforts were used during the

¹¹³ MERKEVIČIUS A. Vaitiekūnų (Radviliškio raj.) piliakalnio gyvenvietės tyrinėjimai 1977 metais. *Archeologiniai tyrinėjimai Lietuvoje 1976–1977 metais*, Vilnius, 1978, p. 115–118; MERKEVIČIUS A. Vaitiekūnų (Radviliškio raj.) piliakalnio gyvenvietės tyrinėjimai 1978 metais. *Archeologiniai tyrinėjimai Lietuvoje 1978 ir 1979 metais*, Vilnius, 1980, p. 26–28.



Vedriai Hillfort (Lithuania), aerial view, 2017.
Photo by Jurgita Bergelienė.

later period of the war with the Teutonic Order and therefore, without a proper examination, it is hard to distinguish the earlier Samogitian hillforts from the later ones used in the 13th and 14th centuries. Probably, the earlier hillforts can be found within hillfort pairs where hillforts stand approximately 500 m from each other; such pairs are an exclusive feature of Samogitia.

In 2006–2008, the author of this text excavated an area of 305.5 m² at the Vedriai Hillfort (Šilalė District, Lithuania) – the entire surviving section of the top and the southern slope.¹¹⁴ By the early 20th century, only a narrow section of the top with the rampart section and the fore-work were left standing; the rest was washed off by the Akmena River which flows by the northern slope of the hillfort. The surviving remains and the research data imply that the Vedriai Hillfort could have been up to 80x40 m large. It used to be well fortified, but its present outlook must be medieval. At the eastern edge of the hillfort top, there was a 5 m high rampart; its external slope went down into a 4 m deep fosse

across which a well-fortified fore-work was built. The western end of the top was fortified too, nevertheless, little has survived of those fortifications. On the eastern slope, about 4 m below the initial top, there was a 4 m wide and 0.5 m deep fosse with a rampart on the external side formed on a steep slope. A 3 m wide and 0.6 m deep fosse found at the western section of the hillfort remains should be its continuation. The fosse should have been excavated in the 2nd half of the 1st millennium A.D. (there were no finds which could enable more precise dating).

In the 11th century, the hillfort underwent a major reconstruction and, most probably, acquired its present outlook. The abovementioned fosse was filled with 40–50 cm thick layer of brownish clay; the slopes were steepened removing up to 4 m wide section of the slope at the bottom. The slopes were also reinforced with wooden drop-log construction barriers. Their features were 2 postholes of 25 and 40 cm in diameter surrounded with stones of up to 20 cm in diameter. At the bottom of one of them, there were fragments of a hand-made pot: its base of 13 cm in diameter, a piece of its decorated body and a slightly profiled rim. During the excavations of 2006–2008, the following artefacts

¹¹⁴ ZABIELA G. Vedrių piliakalnis ir papėdės gyvenvietė 2005–2008 m. tyrinėjimų duomenimis. *Kaltinėnai. Šilalės kraštas IX*, Vilnius, 2010, p. 78–87.



Opstainiai Hillfort excavations (Lithuania), 2008.
Photo by Gintautas Zabiela.

were collected on the slope of the hillfort: an iron arrowhead, a blade, a bronze bracelet fragment, a figure-eight-shaped loop, a fibula pin and a knob of a cruciform pin. The finds dated to the 10th and 11th centuries. During the period, the hillfort had a large foot settlement that, as the arrowheads found therein implied, suffered an attack and was destroyed in the 11th century.

The Scalvians had the smallest habitat among the Balts and therefore their hillforts were few. They underwent an intensive fortification from the late 1st to the early 2nd millennium A.D. Their rather large tops covering 1,000 m² and more were protected with up to 8 m high ramparts. There are 10 Scalvian hillforts in Lithuania; a similar amount is located in the Kaliningrad Oblast of the Russian Federation. Scalvian hillforts had large foot settlements and cemeteries nearby.

The Opstainiai Hillfort (Pagėgiai District, Lithuania) is probably the only one well-researched undoubtedly Scalvian hillfort. It is located near the

Vilkyškiai town and therefore often called after it too. In 2008 G. Zabiela and in 2009 Romas Jarockis researched the total area of 140 m² in the southern part of the top and the slope where a staircase was to be built¹¹⁵.

The hillfort was built on the eminence cape on the left bank of the Apstė Brook. Its top is 84 m long and 40 m wide at the northern edge by the rampart; its southern edge is 18 m wide. The rampart by the northern edge was levelled but it still remained 4 m high. At the foot of the rampart, there was a fosse, then the second rampart and the second fosse were built, which were nearly destroyed till nowadays. An up to 0.8 m high rampart circumvents the eastern edge of the top. Most likely, it circumvented the entire perimeter, but its western section fell into the brook. Before the hillfort was damaged by ploughing, the rampart on the northern edge of the top could have been up to 8–9 m high and, along with steep 10–20 m high slopes, made the Opstainiai Hillfort one of the best-fortified strongholds of Scalvia.

The upper section of the cultural layer was disturbed by ploughing that continued till 1960³. Therefore, no features of the buildings have survived. In 2011, the team of Sebastian Messal (*Archaeological Institute of Germany*) surveyed the hillfort top with a geo-radar. Although the acquired data has not been verified archaeologically, the features revealed were identified as construction traces¹¹⁶. An up to 1 m thick cultural layer preserved only abundant metallic artefacts and potsherds. Among them, there was a large broken pot with a 24 cm wide mouth and a slightly rusticated surface;

¹¹⁵ JAROCKIS R.; ZABIELA G. Opstainių (Vilkyškių) piliakalnis ir papėdės gyvenvietė. *Archeologiniai tyrinėjimai Lietuvoje 2008 metais*, Vilnius, 2009, p. 89–93; JAROCKIS R. Opstainių (Vilkyškių) piliakalnis ir papėdės gyvenvietė. *Archeologiniai tyrinėjimai Lietuvoje 2009 metais*, Vilnius, 2010, p. 37–38.

¹¹⁶ MESSAL S.; BLIJUJENĖ A.; JAROCKIS R.; ZABIELA G. Non-destructive methods in field archaeology in Lithuania: the first results of a German – Lithuania Project. *Archaeologia Baltica*, Klaipėda, 2015, t. 21–22, p. 90–109.

it was decorated with a roller on the shoulders. The lower horizon of the cultural layer was clay, implying that in the early 2nd millennium A.D. fortifications of the hillfort were extended. The initial fosse by the southern edge of the top was levelled around the same time. Excavations on the slope revealed that here the clay layer was up to 2 m thick. Under that, some burned bones and 3 iron artefacts (a buckle, a link, and a pendant) were found at one 2x1 m large spot: that should have been a cremation grave.

The Prussian hillforts are poorly researched too. Before the WWII, German researchers focused mostly on hillfort registration. After the WWII, the East Prussia was split between two different states and research of its past turned into an off-topic for many decades. Recently, the research of the Prussian hillforts has intensified, nevertheless, most of the excavations have been of small scale and the finds have not been published. The research of the Craam Hillfort performed by Frida Gurevich (*Фрида Гуревич*, 1912–1988), the researcher from Leningrad (now Sankt Petersburg), in 1950–1951 remains the only exclusion enabling cognition of the Prussian hillforts. In 1947, all the toponyms in the Kaliningrad Oblast were changed, hence the present location of the hillfort is Grachevka (*Грачевка*).

The Craam (Grachevka) Hillfort is located in the northwestern part of the Sambian Peninsula. It was built on a brook bank cape. Its top is oval and 45x20 m large. It is circumvented with a 1–2 m high rampart which is 10 m wide at the base. The slopes are steep, 7–8 m high. The hillfort has a fore-work across a 5 m deep and 8 m wide fosse. Its top is rectangular, 50x40 m large. It has a 5 m high rampart on the side of the hillfort and two 4 and 3 m high ramparts from the side of the fields with a 7 m wide fosse in-between. The slopes of the fore-work are very steep and 14 m high. The fortifications of the fore-work implied that this was not a fore-work, but a castle built by the Teutonic Order, whereas the true Prussian (Sambian) hillfort was on the cape. After the Order subdued the Sambians, their initial



Craam (Grachyovka) Hillfort (Kaliningrad Oblast, Russian Federation), building remains at the upper cultural layer horizon (ГУРЕВИЧ Ф. Д. Из истории юго-восточной Прибалтики в I тысячелетии н. э. *Материалы и исследования по археологии СССР*, Москва, Ленинград, 1960, нр. 76. Древности северо-западных областей РСФСР в первом тысячелетии н. э., рис. 33).

place of the castle turned out to be unfit for a new Teutonic castle, hence, it was built in nearby location more suitable for military matters. Therefore, the hillforts sustained a purely Sambian legacy.

The excavations covered the entire hillfort top and two sections of the rampart: 920 m² in total. Two horizons of the cultural layer were identified. The earlier one was dated to the 1st half of the 1st millennium A.D. and the later one to the late 1st



Pajevonis Hillfort (Lithuania), 1964.
Photo by Pranas Kulikauskas.

and early 2nd millennium A.D.¹¹⁷. The earlier horizon could have been left by an unfortified settlement because it was found opposite to the rampart and there were no features of fortifications attributable to that period. The horizon of the later period revealed 3 layers of stones covered with sand. The stones were large, up to 60 cm in diameter.

On the top, stone pavements and individual stones revealed locations of 9 houses; the exact dimensions were identified for 4 of them. The 5.6x4.4 m large house had a 60x40 cm hearth in the centre; it was circumvented by six stones of 20–30 cm in diameter. Inside the house, a coulter of a ploughshare as well as potsherds and amber pieces were discovered. The finds within the 4.6x4 m large house also included potsherds and amber pieces, as well as an iron 50 g weight with an engraved cross,

an iron bucket handle, 2 amber beads, and nails. Two other buildings were 3.5x3 m and 4.5x3 m large. Among the more interesting finds, there were an ornamented sash-like bracelet and a ring with a coiled mount (both made of bronze), and touchstones.

The artefacts collected during the excavations of the Craam (Grachevka) hillfort were rather interesting. At least 80 individual pots were identified based on potsherds; most of them were hand-made, decorated with an ornament of inter-crossing lines or dimple rows in the neck and shoulder area. Wheel-made pots (not more than 10) were decorated with an ornament of parallel lines. The finds of a bronze sickle, an iron saw and a coulter were exceptional for hillfort excavations. In general, the finds imply that the community of the hillfort was involved in agriculture and grew wheat.

The hillforts of the Nadrovians, the least known Baltic tribe, are the least-researched as well. They are scattered in the southwestern outskirts of Lithuania and the eastern part of the Kaliningrad Oblast of the Russian Federation. The Nadrovian hillforts are few.

¹¹⁷ ГУРЕВИЧ Ф. Д. Из истории юго-восточной Прибалтики в I тысячелетии н. э. *Материалы и исследования по археологии СССР*, Москва, Ленинград, 1960, нр. 76. *Древности северо-западных областей РСФСР в первом тысячелетии н. э.*, с. 329–451.

Most of them were built on capes at river valleys and had massive fortifications (2–7 m high ramparts from the eminence side). The tops were inhabited permanently; there were wooden buildings on them. There were foot settlements too, however, no Nadrovia cemeteries have been found in the vicinities of their hillforts.

In 1963–1964, P. Kulikauskas researched the Kunigiškiai Hillfort (Vilkaviškis District, Lithuania). The hillfort located near the Pajevonis village is known after the name of this village too. It is one of the larger Baltic hillforts. It was built on a cape at the confluence of the Jevonis and Ėglupis Brooks. The top is oval, 150x76 m large, and covers about 1 ha. It is circumvented by a rampart the height of which varies from 4 m in the western part to 2 m at other sections. The eminence stretches westwards from the hillfort and, therefore, additional fortifications were built on this side: a fosse was excavated on the other side of the rampart; then there was the second 1.5 m high rampart and the second fosse. Some of the slopes had additional fortifications too: there are 2 ramparts and 2 fosses by the southern slope. The slopes are steep, 10 m high; their edges have been washed off by the brooks. This rather large hillfort was surrounded by a 100–300 m wide foot settlement which covered some 12 ha in total.

In two seasons, the total area of 900 m² (5.3 percent of the top) was excavated including rampart profiles¹¹⁸. An up to 80 cm thick cultural layer with building features was discovered. The finds included a Roman coin, iron arrowheads, knives, awls, bridle fragments, a tweezer, a pin, bronze fibulas, spiral rings, pendants, a bracelet fragment, touchstones, ceramic spindles, and potsherds (the pottery with rusticated and smooth surfaces prevailed). The profile of the main rampart by the western edge of the top revealed that the rampart was raised in 3 stages; the smaller ramparts on the

sides were raised in 2 stages. The initial fortifications consisted of a 1.4 wide and 1.3 m deep fosse found at the edge of the top; on top of that, there was a wooden barrier made of 11–25 cm thick poles dug with a step of 7–24 cm from one another, which held horizontal logs. The first rampart was 3 m high; the second one was raised up for 1 m. The third rampart reached the height of 6 m and was widened to 20 m at the base. Its top was paved with stones. The earlier external 1 m high rampart also had a wooden barrier on top. Rampart reconstruction stages remained undated, but generally the researcher identified the chronology of the hillfort as a very early one attributing it only to the 1st–6th century A.D. However, it is not correct, because the wheel-made pottery known only since the early 2nd millennium A.D. was found at the hillfort¹¹⁹ and the upper cultural layers were disturbed by ploughing. Massive fortifications also are an exclusive feature of the early 2nd millennium hillforts. Therefore, the last stage of the Kunigiškiai Hillfort should be dated to that period. Most likely, this hillfort saw the 13th century, too.

The Yotvingians, who inhabited the southwestern Lithuania, northwestern Poland, and western Belarus, were a strong tribal unit which included sub-tribes with different names. In terms of use, the name of the Yotvingians is similar to the one of the Prussians: it is a collective ethnonym covering different tribes. However, as the features of their individual cultures have not been identified yet, we can review the Yotvingian hillforts only in general terms.

The Yotvingian hillforts are rather well researched archaeologically, though the level of research varies from country to country. Usually, the Yotvingians built their hillforts of stand-alone hills circumventing the tops with up to 5 m high ramparts, yet some hillforts were built on bank capes too; they were equipped with similar fortifications. Massive earthworks involving not only rampart raising but forming of wide levelled tops as well

¹¹⁸ KULIKAUSKAS P. *Užnemunės piliakalnių I–XIII amžiuje*. Vilnius, 1982, p. 24–25, 34–36, 41–42, 46, 48–49, 52, 53, 63, 80–81.

¹¹⁹ ZABIELA G. Piliakalnių likimas Lietuvos valstybės susidarymo išvakarėse. *Lituanistica*, 1991, nr. 4(8), p. 32.



Kaukai Hillfort (Lithuania), rampart layers.
Photo by Pranas Kulikauskas.

represent a typical feature of the Yotvingian hillforts – their steep up to 10 m high slopes. The 10th–12th cultural layers of many Yotvingian hillforts revealed features of attacks which ended with the destruction of the castles. Usually, they were rebuilt enhancing reinforcements. The houses on the tops were mostly built closer to the edge and the ramparts. The Yotvingian hillforts had rather large foot settlements. The most important Yotvingian centres covered entire complexes of archaeological monuments with several fortified spots (such as Szurpily, Poland).

Another complex of the similar Yotvingian fortifications stretches through Kaukai and Obelytė locations (Alytus District, Lithuania). It includes two hillforts now located in two different nearby villages, a fore-work, and an adjacent foot settlement. The main hillfort located in Kaukai was built on an eminence cape formed by the curve of the Peršėkė Brook. Its oval 25x17 m large top is circumvented with a 1–5 m high rampart. Its highest section is in the south, where the hillfort had to be protected from adjacent fields. At its foot, a 12 m wide and 1.5 m deep fosse was excavated. The Obelytė Hillfort was built on the opposite bank of the Peršėkė Brook on the eminence cape westwards from the

Kaukai Hillfort. Out of that, only a damaged 25 m long and 2 m high rampart with a narrow edge of the top has survived; the rest was washed off by the brook. This hillfort was equipped with a fore-work which had a rectangular 70x65 m large top protected from the eminence with an up to 1 m high rampart which now is almost leveled. Both hillforts were surrounded by a 7.5 ha large foot settlement.

In 1967–1969, P. Kulikauskas researched the western part of the Kaukai Hillfort top (250 m²) and made a profile of its southern rampart and the fosse (80 m²). He also made some excavations of the ramparts of the Obelytė Hillfort and its fore-work. At the Kaukai Hillfort, two main cultural layers were distinguished¹²⁰. The lower one dating to the 5th–9th century contained rusticated potsherds and some random artefacts (crossbow fibulas and spiral temple ornaments). At that time, the hillfort was fortified with a small rampart made of logs and stones.

The upper cultural layer of the Kaukai Hillfort dated to the 10th–11th century. It contained features of former houses: stone pavements and hearts. Near the hearts, all kinds of burned crops were found (barley, peas, beans, and even poppy). There also were animal bones (all kinds of livestock, dog, boar, moose, deer, roe, bear, beaver, and unidentified bird bones). The collection of different ornaments was abundant: 15 neck-rings, 14 bracelet fragments and pins, 80 glass and bronze beads, 6 penannular fibulas, and numerous rings. As for the tools and utensils, there were 83 spindles, 40 awls, 2 needles, 2 strike-irons, many knives, touchstones, scissors, a cylindrical lock, and a weight. There were pieces of riding gear too: links, buckles, and 3 spurs. The potsherd collection amounted to over 1,000 wheel-made pieces. The described period was reflected by the two upper layers of the rampart. Initially, the primary rampart was raised mounding on a 2 m thick layer of clay laced with timber; a wooden barrier was built on top. After it burned, the rampart was

¹²⁰ KULIKAUSKAS P. *Užnemunės piliakalniai I–XIII amžiuje*. Vilnius, 1982, p. 29, 38, 47, 49–62, 64–76, 85–88, pav. 93–152.



Excavations of the Szurpily Hillfort rampart (Poland), 2015.
Photo by Gintautas Zabiela.

reconstructed for the third time. This time a 3 m thick layer of clay was mounded on top; it was timber-laced too.

During the excavations at the Kaukai Hillfort, human bones (130 individual pieces) were discovered scattered in the central part of the top. It was established that they belonged to 25–35 individuals¹²¹. Most of them were male, though there were remains of 2 or 3 women and 4 or 5 11–15 year-old teenagers. Those were the remains of the defenders of the castle or people who sought refuge therein during the attack. Abundant artefacts found at the hillfort implied that most of their belongings remained therein. The castle which once stood on the Kaukai Hillfort burned after it suffered an intensive arrow shower. As many as 126 arrowheads of different forms were collected in the excavated area. Some of them were found piercing the rampart. Its worth to mention a chainmail fragment found at the hillfort, which was an extreme rarity. Initially, the besiegers of the castle were identified

as the Mongols-Tartars; however, dating of finds discovered during the excavations show that the castle was destroyed in the 11th century and therefore the besiegers should be searched among the princes of the Kievan Rus who organised attacks against the Yotvingians. Their armies included nomadic tribes of the steppes and that was where the characteristic arrowheads come from.

The Yotvingian hillforts of the early 2nd millennium researched in Poland are equally interesting. In 1984–1991, Grażyna Iwanowska excavated the Jeglińiec Hillfort.¹²² The Szurpily Hillfort was researched by Jerzy Okulicz-Kozaryn (1931–2012) in 1981–1991 and by Cezary Sobczak in 2008–2011 and 2014–2015.¹²³ The Skomack Wielki Hillfort was excavated

¹²² IWANOWSKA G. Excavations at the Jeglińiec hillfort – recent developments in Balt archaeology. *Antiquity*. 1991. September. Vol. 65, nr. 248, p. 684–695.

¹²³ OKULICZ-KOZARYN J. Szurpily – zespół śladów osadnictwa z czasów od III w. p. n. e. do XIII w. n. e., *Przewodnik LXIV zjazdu polskiego towarzystwa geologicznego na Ziemi Suwalskiej 9–12 września 1993*. Warszawa, 1993, p. 139–146; WŁOSZEK M. Archeologiczne badania kompleksu szurpilskiego w ramach projektu „Archeologia Jaćwieży” – cele badawcze i wstępne wyniki. *Archeologia Jaćwieży. Dawne badania i nowe perspektywy*, Warszawa, 2016, p. 205–215.

¹²¹ Investigations of antropologist Silezijus Pavilonis (1919–1998)



Reconstruction of the Szurpily Hillfort castle (Poland)
(przyjacielepma.pl).

by Marcin Engel in 2014–2015.¹²⁴ Each of the hillforts revealed something unique: for instance, at the Jeglińiec Hillfort, 800 bronze jewellery pieces fragments were collected and on the slopes of the Szurpily Hillfort cremation burials were found. As only preliminary accounts have been published for the above-mentioned excavations, we cannot provide more comprehensive information on the fortifications of these hillforts and buildings on their tops.

The level of cognition of hillforts is very different for different Baltic tribes. Every visitor can admire their outlook (although not all of the hillforts have been cleared from greenery), their internal structure can be revealed only by means of

archaeological excavations. The most extensive research of the hillforts took place in 1930s–1980s, when the methodology of such research and find recording was still under development. Due to that, some things passed unnoticed or unrecorded. Recently, the small-scale excavations started to spread. Being orientated towards meticulous recording and analysis of the finds, they provide a lot of new data, yet failing to reveal overall hillfort development due to their limited scope. There are attempts to improve the situation by applying non-invasive hillfort research methods, but a lot of work still has to be done to achieve a clear interpretation of their data. The decline of interest in the ethnic history which has occurred in recent decades also impedes research of the Baltic hillforts; therefore, archaeologists still have a lot of work in this field.

¹²⁴ HRYNCZYŚYNN M. Skomack Wielki, gm. Stare Juchy, stan. 1 i stan. 16. Wstępne wyniki badań archeologicznych z lat 2014–2015. *Archeologia Jaćwieży. Dawne badania i nowe perspektywy*, Warszawa, 2016, p. 217–224.

Hillforts in the Middle Ages: Castles in the Defence of the Lithuanian State

Lithuania was first mentioned in 1009 and, by the 13th century, it turned into a full-fledged state. In 1253, Grand Duke Mindaugas was crowned king. Lithuania expanded its frontiers swiftly subduing the neighbouring Baltic and Slavic lands. However, a large part of the Baltic lands was already conquered by the Germans. On the brink of the 12th and 13th century, the Northern German merchants and monks mobilised their activities at the mouth of the Daugava. In 1201, the city of Riga was found. One year later, the monastic military order of the Knights of the Christ better known as the Livonian Sword-Brothers was established. It expanded its territory rapidly, too, conquering the Livs, the Latgians, the Estonians, the Selonians, the Semigallians, and the Curonians. In 1236, the army of the Sword-Brothers invading Lithuania was overwhelmed at the Battle of Saule and their remains were incorporated into the Order of Brothers of the German House of Saint Mary in Jerusalem (the Teutonic Order), which was engaged into the conquest of Prussia after settling by the Vistula in 1226. By the late 13th century, after long and bloody fights, the Teutonic Order subdued Prussia and expanded their territory to the lower reaches of the Neman turning into an ultimate threat to the Grand Duchy of Lithuania.

At this stage of the development of the Baltic lands, the role of the hillforts and their systems became of great importance. Wooden castles of

different Baltic tribes were crucial for the fight against the invaders. Many of them were destroyed during the war in the 13th century. Both the Sword-Brothers and the Teutonic order tried to take control over the castles of the Balts and built their own defence castles at some of the hillforts. However, they gave priority to masonry castles that could only be built on plains. Therefore, the role of hillforts declined rapidly in the lands conquered by the Teutonic Order.

Lithuania was a different case. Here, the masonry defensive architecture started developing only in the 14th century and masonry castles were very few. Therefore, the crucial mission of the territorial defence was performed by wooden castles built at hillforts (and sometimes at other locations). Their construction was no longer the concern for tribes or their nobles as it became the affair of the entire state.

Written sources recorded numerous names of wooden castles, yet historians and archaeologists are not always successful in identifying them with actual hillforts.

The late hillforts, dating from the 13th to the 1st half of the 15th century, differ from the hillforts of the earlier tribal epoch. The available data enables distinguishing two groups with chronological differences. The 13th century hillforts feature modest fortifications. Usually, they were built by enhancing



Mažulonys Hillfort (Lithuania) dating to the early 1st millennium A. D. and the 11th–13th century. Photo by Manvydas Vitkūnas.

fortifications of the earlier hillforts of the tribal epoch. Meanwhile, the 14th century hillforts have much stronger fortifications. This feature is especially well visible at the latest hillforts abandoned in the late 14th – early 15th century. Their ramparts made of clay reached the height of 5 to 7 m and the fosses were up to 6 to 10 m deep (i.e., Eiguliai, Kaunas, or Šeimynišiai, Utena District, both in Lithuania). Such hillforts were often equipped with fortified fore-works.

The 13th century hillforts are less researched, except for some of the hillforts dating to the end of the tribal epoch described in the previous chapter. Some of the castles of that period were built at the locations of the earlier hillforts by enhancing their fortifications. The Mažulonys Hillfort (Ignalina District, Lithuania) dating from the 11th to the 13th century could serve as a typical example of such case. The hillfort was built on a stand-alone hill on the bank of the Vėlys Lake. It had a foot settlement as well. The hillfort top was oval, 35x26 m large, fortified with a 1.5 to 2.0 m high and 14 m wide rampart. There was a 3 m terrace on the south-eastern slope; its 1.5 m high slope went down into a 8 m wide and 0.3 m deep fosse; across that a 12 m wide and 0.5 m high

rampart was mounded. The height of the slopes varied from 12 m to 30 m. In 1907–1908, Vladimir Kashirski (*Владимир Каширский*, 1883–1908) excavated over 100 m² on the hillfort top and made a profile of its northern slope. A very thick (up to 5 m) cultural layer was discovered. Its bottom horizon contained brushed potsherds and, therefore, was dated to the first centuries A.D. The top horizon dated to the 11th – early 12th century. It contained features of wooden constructions, which rested on the internal side of rampart (up to 7 log layers were discovered). It also contained wheel-made potsherds and many other 11th–13th artefacts: axes, knives, spearheads, arrowheads, a sickle, slate spindles, jewellery, bridle bits, and stirrups¹²⁵. In 2011, an area of 27 m² was excavated at the hillfort top by Dovilė Baltramejūnaitė. She discovered a crossbow arrowhead, a cross pendant dating to the 11th–12th century, a medallion, etc.¹²⁶ Presumably, the castle of the Mažulonys Hillfort was destroyed during a siege.

The Šeimyniškeliai Hillfort (Anykščiai District, Lithuania) fully excavated by G. Zabiela in 1990–2006 (the excavations covered the entire top and profiles of both ramparts and slopes – 3.846 m² in total) had two cultural layers. The first one dated to the middle of the 13th century and the other to the late 14th century.¹²⁷ The castle was built at a previously uninhabited site. The yard (the hillfort top) was uneven; it was fortified with a wooden wall along the edge constructed of up to 50 cm thick vertical poles dug into the soil with a step of 2 to 2.5 m holding horizontal logs. On both ends of the top, two 1.5 to 2.3 m high and 12 to 21 m wide ramparts were mounded using the mixture of sand and clay. They were reinforced with irregular rectangular crib-work chambers built of 20 cm thick pine

¹²⁵ DAUGUDIS V. Mažulonių piliakalnis. Iš *lietuvių kultūros istorijos*. Vilnius, 1961, t. III, p. 17–40.

¹²⁶ BALTRAMEJŪNAITĖ D. Mažulonių piliakalnis. *Archeologiniai tyrinėjimai Lietuvoje 2011 metais*, Vilnius, 2012, p. 52–56.

¹²⁷ ZABIELA G. The 1990–2010 investigations of Šeimyniškeliai hillfort. *Archaeological Investigations in Independent Lithuania 1990–2010*, Vilnius, 2012, p. 69–75.

logs and high-cut stumps. The 13th century cultural layer was intensively disturbed during the 14th century hillfort reconstruction. Its dating was facilitated not only by the finds datable to the respective period but also by the dendrochronological date established by Mindaugas Brazauskas using the log found at the base of the dam at the foot of the hillfort: it was 1232. Various direct and indirect historic and toponymic data have enabled to identify the Šeimyniškėliai Hillfort as the Voruta Castle, in which the Grand Duke Mindaugas withstood the siege of his rivals in the first half of 1251¹²⁸.

The hillfort complex of Kernavė (Širvintos District, Lithuania) is one of the most impressive in the entire Baltic habitat¹²⁹. Along with the medieval city which developed at the foot, this complex acquired the major weight in the 13th–14th century, when Kernavė was among the most important centers



Reconstruction of the wooden castle at the Šeimyniškėliai Hillfort (Lithuania).
Reconstruction made by PLLC "Urbanistika" in 2006.

¹²⁸ ZABIELA G. Kur stovėjo Vorutos pilis? *Lietuvos istorijos metraštis* 1991, Vilnius, 1993, p. 5–22.

¹²⁹ LUCHTANAS A.; VITKŪNAS M. Kernavės gynybinis kompleksas, *Karo archyvas*, Vilnius, 2004, t. XIX. p. 30–83.

Šeimyniškėliai Hillfort near Anykščiai (Lithuania) – the only fully excavated hillfort in Lithuania.
Photo by Lukas Kalvaitis.





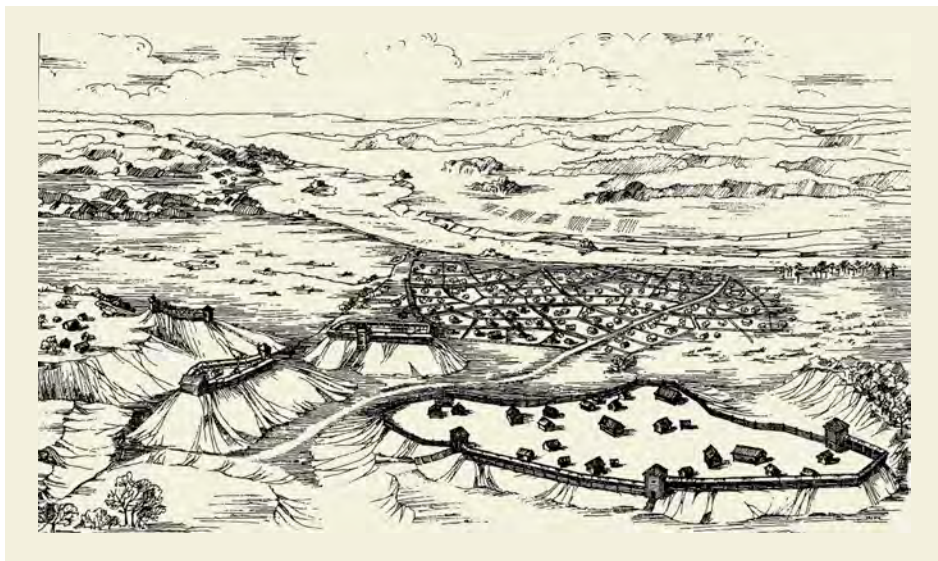
Kernavė Hillforts (Lithuania) viewed from the Pajauta Valley. Photo by Giedrius Grigonis.



Archaeological excavations of the Mindaugo Sostas (Mindaugas' Throne) Hillfort in 1979 – the start of the professional research of the Kernavė archaeological monument complex (Lithuania). Museum of the Cultural reserve of Kernavė, Directorate archive.

Kernavė Hillfort complex (Lithuania), aerial view. Photo by Zenonas Baubonis.





of Lithuania. In 2004, the State Cultural Reserve of Kernavė covering this hillfort complex was included into the UNESCO World Heritage List.

In 1979, during the spring thaw, the eastern slope of the Mindaugo Sostas (*Mindaugas' Throne*) Hillfort went down triggering the excavations of the hillforts of Kernavė. In 1979–1982, almost the entire top (458 m²) was excavated by P. Kulikauskas and R. Kulikauskienė, except for its southern end¹³⁰. The Pilies Kalnas (*Castle Hill*) Hillfort, the largest hillfort of Kernavė, was researched in 1983 by R. Kulikauskienė and in 1985 by Aleksiejus Luchtanas.¹³¹ 518 m² of the

Kernavė town and castles in the 13th–14th century (Lithuania). Reconstruction by Aleksiejus Luchtanas ir Dalia Grigonienė. Museum of the Cultural reserve of Kernavė, Directorate archive.

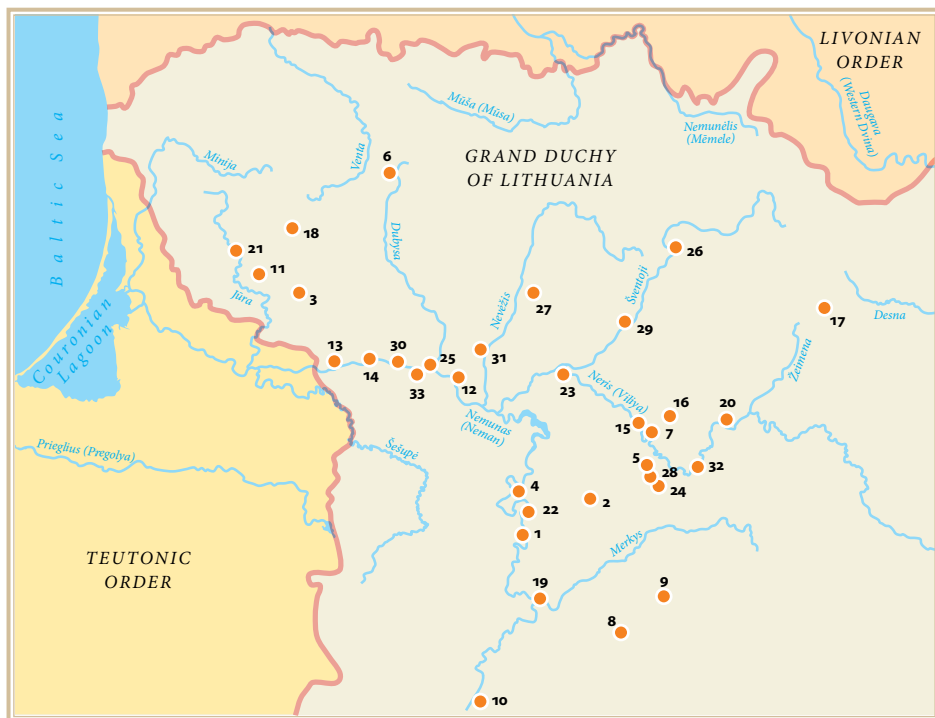
top were excavated. In 1985, A. Luchtanas also excavated the profile of the fosse between the Aukuro Kalnas Hillfort Mindaugo Sostas Hillfort and the Aukuro Kalnas (*Altar Hill*) Hillfort (15 m²). The Aukuro Kalnas Hillfort was researched by the same researcher (A. Luchtanas) in 1992–1993, when 194 m² of the top were excavated.¹³² In 1989, the fifth previously unknown hillfort of Kernavė called Žvalgakalnis was discovered; it was in the area of the Kriveikiškės Vilage. The area of 15 m² was excavated there; no fortification features were discovered, only potsherds dating to the middle of the 1st millennium A.D. and

¹³⁰ KULIKAUSKAS P.; LUCHTANAS A. Archeologiniai tyrinėjimai Kernavėje 1979 metais. *Archeologiniai tyrinėjimai Lietuvoje 1978 ir 1979 metais*, Vilnius, 1980, p. 35–38; VOLKAITĖ-KULIKAUSKIENĖ R. „Mindaugo sostas“ vadinamo Kernavės piliakalnio tyrinėjimai. *Archeologiniai tyrinėjimai Lietuvoje 1980 ir 1981 metais*, Vilnius, 1982, p. 28–31; VOLKAITĖ-KULIKAUSKIENĖ R. Kernavės piliakalnio „Mindaugo sostas“ tyrinėjimai. *Archeologiniai tyrinėjimai Lietuvoje 1982 ir 1983 metais*, Vilnius, 1984, p. 35–38.

¹³¹ VOLKAITĖ-KULIKAUSKIENĖ R. Kernavės „Pilies kalno“ tyrinėjimai 1983 m. *Archeologiniai tyrinėjimai Lietuvoje 1982 ir 1983 metais*, Vilnius, 1984, p. 38–40; LUCHTANAS A. Kerna-

vės Pilies kalno tyrinėjimai. *Archeologiniai tyrinėjimai Lietuvoje 1984 ir 1985 metais*, Vilnius, 1986, p. 32–35.

¹³² LUCHTANAS A. „Aukuro kalno“ piliakalnio Kernavėje tyrinėjimai. *Archeologiniai tyrinėjimai Lietuvoje 1992 ir 1993 metais*, Vilnius, 1994, p. 50–53.



Medieval Lithuanian castles built at hillforts mentioned in the text (according to: Baranauskas T., *Lietuvos medinės pilys rašytinių šaltinių duomenimis. Lietuvos archeologija*. Vilnius, 2003, t. 24, p. 57–106): 1 – Alytus; 2 – Aukštadvaris (Navė); 3 – Batakliai (Aukaimis); 4 – Birštonas; 5 – Bražuolė; 6 – Bubiai (Dubysa); 7 – Buivyčiai; 8 – Dubičiai; 9 – Eišiškės; 10 – Grodno (Belarus, Grodno Oblast); 11 – Indija (Pūtė); 12 – Jaučakiai (Paštuva); 13 – Jurbarkas (Kolainiai); 14 – Kartupėnai (Bisenė); 15 – Kernavė; 16 – Maišiagala; 17 – Mažulonys; 18 – Medvėgalis; 19 – Merkinė; 20 – Nemenčinė; 21 – Padievaitis (Gediminas' Castle); 22 – Pūnia; 23 – Rukla; 24 – Old Trakai; 25 – Seredžius (Pieštė); 26 – Šeimyniškėliai (Voruta); 27 – Šukioniai; 28 – Trakai (New Trakai); 29 – Ukmergė; 30 – Veliuona (Junigėda); 31 – Vikūnai; 32 – Vilnius; 33 – Žukljai (Medraba). Drawing by Edita Namajūnienė.

the 14th century.¹³³ In 2012, geo-physical survey of Žvalgakalnis was performed using the magnetometer; in 2014, the hillfort was excavated again by Gintautas Vėlius. 78.5 m² were excavated in total, yet only a thin cultural layer was found.¹³⁴ Most probably, the hillfort was used only as an outpost protecting access to the 13th–14th century Kernavė city.

In the late Iron Age, an entire wooden castle complex formed in Kernavė. It acquired its final outlook in the 13th century and existed till the late 14th century. The residence of the duke was on the Aukuro Kalnas Hillfort; the Lizdeika's and the

¹³³ LUCHTANAS A. Žvalgomieji tyrinėjimai Kernavėje ir jos apylinkėse. *Archeologiniai tyrinėjimai Lietuvoje 1988 ir 1989 metais*, Vilnius, 1990, p. 195–196.

¹³⁴ VĖLIUS G. Kernavės (Kriveikiškio) piliakalnis. *Archeologiniai tyrinėjimai Lietuvoje 2014 metais*, Vilnius, 2015, p. 117–122.

Mindaugo Sostas hillforts formed its fortified fore-works; the Pilies Kalnas Hillfort hosted the fortified part of the town separated from the adjacent eminence with a rampart and a fosse; and Žvalgakalnis, the fifth hillfort located in some distance from the first four ones, was an outpost enabling monitoring and control of the wades of the Neris River. There were two unfortified parts of the Kernavė town: the upper one on the terrace of the Neris, near the hillforts, and the lower one in-between the hillforts and the Neris. The cemetery Kriveikiškis, Kernavė, dating to the 13th–14th century and the 14th century cremation burials in the old bed of the Kernavėlė Brook also belong to that period. In that period, Kernavė was not only one of the biggest towns in the ethnical Lithuania but also the seat of the grand duke. For the first time, the name of Kernavė was recorded in the Livonian Rhymed Chronicle written in the late 13th century. It described the year 1279 campaign of the Livonian Teutonic knights against Lithuania which reached Kernavė which was referred to as the domain of Grand Duke Traidenis.

In 1365, Kernavė became a target of another attack of the Teutonic Order supporting Butautas, a son of Kęstutis, who fled to Prussia seeking assistance in seizing Vilnius and becoming a ruler of



Hoard of silver ingots in situ at the Pilies Kalnas (Castle Hill) Hillfort in Kernavė (Lithuania). Museum of the Cultural reserve of Kernavė, Directorate archive.

Mindaugo Sostas (Mindaugas' Throne) Hillfort and the Aukuro Kalnas (Altar Hill) Hillfort (in the background) in Kernavė (Lithuania). Photo by Jonas Vitkūnas.



Lithuania. The Teutonic campaign of 1365 was disastrous to Kernavė. Its defenders tried to fight back but both the castle and the town were burned to ashes. Shortly afterwards, Kernavė underwent reconstruction, yet it did not reach its initial size. In early 1390, a huge army of the Teutonic Order and its allies approached Kernavė once again – this time to support Vytautas who was fighting for the throne with his cousin Jogaila and his allies. The defenders of Kernavė burned the castle and its fore-works themselves and retreated: Jogaila's allies were concentrating forces in Vilnius and, therefore, less important castles were destroyed and abandoned to prevent them from being taken by the enemy. After that, the defensive system of Kernavė was never rebuilt; its residents abandoned the valley and moved to the upper terrace settling in the present territory of the town.

The strategic location of the Aukuro Kalnas Hillfort (this hillfort was the central and the best-protected in the entire complex), its massive fortification features, and abundant finds of luxurious articles show that, in the Middle Ages, this hillfort hosted the main castle of Kernavė and the seat of the duke. Unfortunately, little can be said about what kind of buildings and fortifications stood at the Aukuro Kalnas Hillfort prior to the fire of 1365. After that, the charcoal remains of the old castle were pushed to the edges of the top and onto the slopes and a new castle was built. A 50 to 60 cm wide line of stones was the basement for its walls. Massive vertical poles secured with stones held horizontal logs of the defensive wall, which had roofed battlements with embrasures. The width of the battlements was 3.0 to 3.5. The external side of the wall was daubed with clay making it more fire-proof. At the bottom of the external side of the wall, there were numerous wooden spikes secured in a horizontal position or turned down towards the slope. This additional defence measure impeded access to the walls.

At the foot of the eastern slope of the Aukuro Kalnas Hillfort, by the Pajauta Brook, many stones

used to reinforce the slope were found. The fosse separating the Aukuro Kalnas Hillfort from the Mindaugo Sostas Hillfort was 2.0 to 2.2 m deeper than it is now. Across the fosse, there was an about 2 m rampart mounded of gravel and sand. The hillfort complex of Kernavė also had an entire system of fosses and ramparts regulating water flow and enabling using the streams of the Pajauta Brook and numerous springs to create additional water barriers.

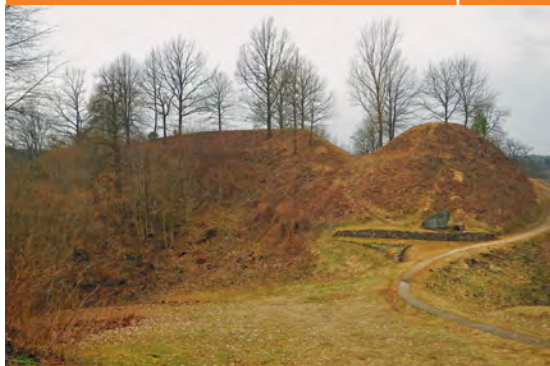
The features of the 14th century fore-work on the Mindaugo Sostas Hillfort were nearly swept off by the reconstruction performed after the devastation following the enemy attack in 1365, too. Before the attack, the top of the hillfort was circumvented with a wooden defensive wall daubed with clay. Its foundation was made of stones joined with clay in some areas; the foundation was 1.4 to 1.55 m wide. It was impossible to determine its height, because a large part of the foundation was dismantled and the stones were used to reinforce the constructions of the new fore-work. The top of the hillfort was covered with houses built of horizontal logs as well as drop-log construction out-houses. The external walls of the houses were covered with clay daub. The houses had plank floors and clay ovens; in some cases, the floors were made of clay or paved with stones. Plank paths as well as storage pits were found outside the houses, too. After the houses on the hillfort top were destroyed by the fire of 1365, a new fore-work was built here shortly afterwards, yet a major reconstruction of the site was performed before that. The top was covered with 0.5 to 1.5 m thick layer of sand to cover the burnt rubble. A 0.8 m thick layer of clay was put on top. The top was then circumvented with a longhouse with a frame made of squared poles dug into the soil at a certain step from one another and secured with stones. The clearances in-between were filled in with horizontal logs and stones. The walls were daubed with clay. The long house was about 3.4 m wide; its roof probably was single-sided. The outer wall of the longhouse, which doubled as a defensive wall of the fore-work, had a

foundation built of stones joined with clay. The long-house was divided into separate rooms.

Cultural layers of the 13th and the 14th centuries shared similar finds (iron knives, razors, various fittings, potsherds, etc.), yet the layer of the 2nd half of the 14th century contained no spindles or other items related to female jobs. There were no large storage pits or hearths or other features witnessing a permanent and intensive habitation on the hillfort. It seems that the functions of the hillfort before the destruction by fire in 1365 and after that differed. Before the destruction, the hillfort was used as a fortified habitation site and it was full of daily life activities. After the reconstruction, the hillfort probably turned into a purely defensive structure, in which food and, possibly, weapons were kept.

In the 13th–14th century, the Lizdeika's Hillfort was the eastern fore-work of the main castle of Kernavė, whereas the Pilies Kalnas Hillfort hosted the fortified district of the medieval Kernavė town. The later covered the area of 2 ha. On the Castle Hill, two horizons of the 13th–14th century layer attributable to the attacks of 1365 and 1390 were distinguished. The rampart was raised in two stages. The initial rampart mounded before 1365 was rather low, only up to 0.8 m high. After 1365, the rampart was raised up and widened considerably. The Castle Hill hosted all kinds of craftsmen and, probably, merchants.

Many other medieval Lithuanian wooden castles built at hillforts followed similar construction patterns as the ones applied at Kernavė. The most vulnerable areas (accesses from adjacent eminences) were protected with ramparts and fosses. External walls of longhouses built along the perimeter of the hillfort tops were of mixed pole-and-log structure. On top they were equipped with battlements; defensive towers were built at the corners (and sometimes along the walls, too). The ramparts and the slopes were protected with additional palisade barriers. Many of the 13th – early 15th century hillforts had large foot settlements covering several hectares or even more.



Punia Hillfort (Lithuania) used to host the mansion at the location of the former medieval wooden castle till the 18th century. Photo by Manvydas Vitkūnas.

Castle defence and other defensive arrangements depended on its ownership (castles belonged to the grand duke or nobles or communities which used them as refuge). It was also important whether the castle was located on the frontline or inlands. In case of an attack, all or at least most of the inhabitants of the threatened area could seek refuge in the castle. Some people also hid elsewhere (in the woods or marshes), however, speaking of castle sieges and captives taken, chroniclers of the Teutonic Order mention not only men but women and children, too.

In some areas of the Grand Duchy of Lithuania wooden castles, combined with masonry ones, made unified defensive systems. The defensive line of the Neman played an extremely important role in the war against the Teutonic Order. It stretched from the Jūra basin in Samogitia along the lower reaches of the Neman River up to Kaunas and then through the middle reaches of the Neman up to Grodno. The most important castles of the Neman defensive line were Medvėgalis, Gediminas' Castle, Pūtvė, and Aukaimis in the Jūra basin; Kolainiai, Junigėda (Veliuona), Pieštėvė, and Paštuva in the Neman lower reaches. A strong masonry castle of Kaunas was built at the confluence of the Neman and the Neris and the section of the Neman middle



Merkinė Hillfort (Lithuania) used to host one of the castles of the Neman defence line. Photo by Dovilė Radovičiūtė.

reaches between Kaunas and the masonry castle of Grodno was covered by Birštonas, Punia, Alytus, Merkinė, and other wooden castles.

In his *Chronicon terrae Prussiae* Peter of Dusbürg specified that the grand duke of Lithuania used to assign a certain number of soldiers to man and defend the castles: “In order to protect the castles built on the frontier, the Lithuanians do as follows. Their king assigns a certain number of armed men to guard one or another castle for a month or longer; when the term expires, they return home and others come in their place to continue the watch.” Further, he told how the Teutonic knights had attacked one such shift of the Lithuanians returning from the Bisenė Castle; it included 85 men¹³⁵. Organizing watches at the front-line castles based on the rotation principle was not only a military necessity, but also a way to strengthen the rule of the grand duke in the outskirts of the country.

Correlation between the numbers of soldiers provided by the sources for the specific castles (85 men in case of Bisenė and 100 in case of Dubysa) and the perimeters of the tops of the hillforts, at which these castles have been localised, implies that one man had to cover approximately two meters of the defensive wall. An optimal ratio would be one man per meter. A larger number would have made a castle vulnerable due to food shortage in case of a longer siege and also made walls overcrowded preventing efficient defence¹³⁶. However, the entire garrison was hardly supposed to fight on the walls all at once and some of the incapacitated defenders had to be replaced with others. Not only men, but also women and children could take care of the wounded as well as of preparing arrows, spears, pitch, and other defensive means and extinguish occurring fires. The actual number of defenders varied every time and depended on the specific situation. Most probably, larger garrisons

¹³⁵ PETRAS DUSBURGIETIS *Prūsijos žemės kronika*. Vilnius, 1985, p. 254–255.

¹³⁶ ZABIELA G. *Lietuvos medinės pilys*. Vilnius, 1995, p.159.

were manning only the most important central and front-line castles.

According to many authors, next to the Neman defensive system, there was a defensive system of Vilnius, too. Its outer – probably incomplete – circle included the castles of Kernavė, Aukštadvaris (Navin-pilis, Naupilis or Navė) and presumably Eišiškės – all located 40 to 50 km from Vilnius. The inner circle in the range of 20 to 30 km included the castles of the Old and New Trakai, Maišiagala, Nemenčinė, Medininkai, Buivydai, and Bražuolė¹³⁷. Some of the abovementioned castles were built at hillforts used since the Iron Age. New castles could have been built not so much to form the defensive circle but rather to cover strategically important routes. In the northwest, this function was carried by reinforced wooden castles of Kernavė and Maišiagala, which were in place since the earlier times; the north was covered by the castle of Nemenčinė.

Castles and their fortified fore-works accumulated supplies of food, armament, and auxiliary defensive means. In the cultural layer of the Kernavė Mindaugas' Throne Hillfort dating to the 2nd half of the 14th century, burned grain was found at two spots. Grain was stored here as food resource accumulated for a potential siege. Burned grain was also found at some other medieval hillforts.

Evidently, only long-term food products (like grain) could be stored as supplies. In case of attack, people fled to castles with other food supplies as well; they even brought their livestock. The wooden castle of Maišiagala was burned in the 14th century, during the same campaign as Kernavė. During that fire 12 sheep burned. Their skeletons were discovered on the hillfort during the archaeological excavations¹³⁸.

During the war with the Teutonic Order, the Lithuanians employed fire-and-smoke signalling system, which helped to warn castle garrisons as well as residents of different areas about the approaching enemy. Toponyms like Žvalgakalnis or Atažvalga translating as the hill of surveillance or the surveillance appear on the banks of the Neris near Čiobiškis and Kernavė. Usually, such names were given to higher hills bearing no hillfort features. It is assumed that wooden surveillance or signalling towers were built on the dominating eminences after raising them up and forming tops.¹³⁹ Mostly, surveillance was performed using natural eminences; however, in some cases hillforts were built specifically for this purpose (i.e., Rukla, Jonava District, Lithuania). Such surveillance hillforts usually had clay ramparts with flat tops.

¹³⁸ *Lietuvos piliakalniai: atlasas*. Vilnius, 2005, t. III, p. 370.

¹³⁹ ZABIELA G. *Lietuvos medinės pilyys*. Vilnius, 1995, p. 69.

¹³⁷ *Ibidem*. p. 178–179.

Nemenčinė castle reconstruction (Lithuania). The National Museum of Lithuania. Photo by Gintautas Zabiela.





Veliuona (Junigeda) castle was built during the war against the Teutonic Order (Lithuania).
Photo by Manvydas Vitkūnas.

Written sources prove that the warning system worked efficiently. During the campaign of 1317, the Teutonic forces planned to storm Veliuona. The attempt failed and the army began to retreat. People of the area (and, probably, garrisons of other castles) noticed smoke signals and went on pursuit. *‘At dawn, when [the Teutonic knights] decided to approach the castle of Junigeda stealthily and take it over, the garrison, which was warned, lit fire and signalled with smoke to their pagan neighbours that there was the brothers’ army there. The brothers approached and attacked the castle intensively turning its fore-work into ash after a long fight <...>. When the brothers turned back home afterwards, the pagans of the neighbourhood who saw the smoke of the abovementioned fire all came together and started attacking them’*¹⁴⁰.

In some cases, when the forces of the enemy were overwhelming and the defensive potential was limited, castle garrisons faced a serious

dilemma: to try to defend the castle or to abandon it. Cases when castles were abandoned without a fight are known, yet those were rare and mostly involved smaller castles on the front-line with limited defensive potential. For instance, in 1291, the Teutonic knights found that the Kolainiai Castle had been abandoned so they burned it¹⁴¹.

In other cases, defenders used all kinds of tricks to get out from the besieged castles. For instance, in 1364, the Teutonic knights besieging the Pieštė Castle (Seredžius, Jurbarkas District, Lithuania) were deceived. The defenders agreed to negotiate the terms of surrender and baptism, yet asked for several days to make the final decision and then, at night time, the garrison managed to escape the castle unnoticed. When the Teutonic knights climbed the walls next morning, they found the castle empty and burned it¹⁴².

¹⁴¹ Ibidem, p. 224–225.

¹⁴² VYGANDAS MARBURGIETIS *Naujoji Prūsijos kronika*. Vilnius, 1999, p. 237–238.

¹⁴⁰ PETRAS DUSBURGIETIS *Prūsijos žemės kronika*. Vilnius, 1985, p. 271.

Usually, when an enemy approached a castle, it laid a siege and blocked it so that no-one could get out or sneak inside. Written sources do not mention any particularly long sieges of the Lithuanian castles causing famine among the defenders in the 13th–15th century. The sieges lasted several weeks at most and the castles were either taken or the attackers retreated after devastating the area and/or achieving only partial success, i.e., burning the fore-work or destroying some other segment of defensive complex.

The attacks on the castles involved various weapons and siege equipment: ladders, siege towers, and siege engines (rams and catapults). Siege engines were used not only against masonry castles but also against wooden ones (i.e., against Veliuona in 1363)¹⁴³. Both the Lithuanians and the Teutonic Order used edged weapons (spears, knives, swords, etc.), bows and crossbows as well as fire weapons – bombards – since 1381 and hand-held firearms (pixides). For the first time, the Teutonic Order used bombards against Lithuania in 1381 during

the siege of the wooden Naupilis Castle (also called Navinpilis or Navė)¹⁴⁴. The castle has been localised at the Aukštadvaris Hillfort (Trakai District, Lithuania).¹⁴⁵ Defenders also used fire-arms, stones, hot water, and pitch, which was poured on the heads of the attackers trying to climb the walls.

One of the often-used attack tactics was setting a castle on fire. In 1363, while attacking the castle of Veliuona, the Teutonic knights managed to set on fire one of its corners and a strong wind helped to spread fire all over the castle¹⁴⁶. It looks like bushwood was brought to the walls on the downwind side and then set on fire so that the fire could spread onto the wooden walls of the castle.

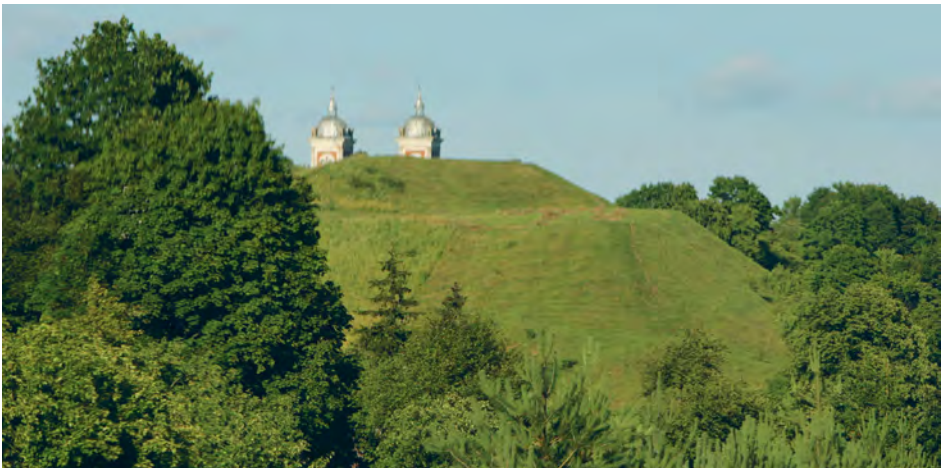
Castle garrisons often managed to defend their castles even when the enemy took the fore-works. In 1317, at Junigeda (Veliuona) the Teutonic knights

¹⁴⁴ MARBURGIETIS VYGANDAS *Naujoji Prūsijos kronika*. Vilnius, 1999, p. 166.

¹⁴⁵ ŠADUIKIS Č. Nawenpill – Navininkai – Aukštadvaris. *Mokslas ir gyvenimas*, 1971, nr. 7, p. 58; BARANAUSKAS T. Lietuvos medinės pilys rašytinių šaltinių duomenimis. *Lietuvos archeologija*, Vilnius, 2003, t. 24, p. 66.

¹⁴⁶ MARBURGIETIS VYGANDAS *Naujoji Prūsijos kronika*. Vilnius, 1999, p. 128.

¹⁴³ Ibidem, p. 120.



Seredžius Hillfort (Lithuania) – the location of the Pieštėvė Castle. Photo by Martynas Vidzbelis.



Aukštadvaris Hillfort (Lithuania) –
the location of the Navė Castle (Navinpilis).
Photo by Manvydas Vitkūnas.



A pot from the Aukštadvaris Hillfort (Lithuania).
Photo by Vytenis Podėnas
(The National Museum of Lithuania).

managed to burn the fore-work but failed to take the castle. One year later, in 1318, they burned the fore-works of Veluona again – this time with all the harvest which was there. One more year later, in 1319, they failed to take the castle again and only the fore-work was destroyed¹⁴⁷.

There were also individual cases when castles fell due to treason. In 1301, one resident of the Aukaimis Castle called Draika sent his son to the Teutonic knights promising to help them to take over the castle. At night, when Draika was on the watch, he opened the gate and let the Teutonic knights into the castle; they killed almost all the men and took women and children into captivity. Draika was awarded for his treason with lands and settled in Prussia along with his family¹⁴⁸. In 1305, the Aukaimis Castle was betrayed again – this time by Svirtilas¹⁴⁹. Another traitor helped the Teutonic

¹⁴⁷ PETRAS DUSBURGIETIS *Prūsijos žemės kronika*. Vilnius, 1985, p. 271–272.

¹⁴⁸ *Ibidem*, p. 243–244.

¹⁴⁹ *Ibidem*, p. 250.

Knights to take the Pūtvė Castle¹⁵⁰. In 1390, Vytautas and his allies at the time took over the Curved Castle of Vilnius, which was defended by Jogaila's brother Karigaila, also with the help of traitors (most probably, supporters of Vytautas)¹⁵¹.

When defence failed and a castle was taken over by enemies, the defenders suffered a tragic fate: they were either killed or taken captives. Peter of Dusburg provided an explicit explanation what fate awaited the losers: after taking the Medraba Castle in 1291, the Teutonic knights "burned it to the ground and killed all the people or took them captives."¹⁵² After burning the Aukaimis Castle in 1305, they also "killed all the men and took women and children captives"¹⁵³.

Describing the attack on the Medvėgalis Castle in 1329, Wigand of Marburg revealed that in some cases the defenders and refugees had other alternatives but death or captivity: "There [the Teutonic knights] besieged the Medvėgalis Castle. They took it and found many [people] therein. Sure, the Master wanted to kill them all but King John [of Bohemia] saved their lives with his plea and they were converted to the Catholic faith by baptism on the day of the Purification of the Blessed Virgin [Mary] [1329. II.2]. And they gave a promise to the Master that they would remain true to the [Catholic] faith. The king [of Bohemia] liked that very much. But after the winter passed, they became disgusted with baptism and started longing for their pagan faith"¹⁵⁴. Therefore, if not for the Christianization ambition of King John of Bohemia, the Teutonic knights would have killed all the people of Medvėgalis.

The alternatives for being killed or captured by the enemy were two: surrender (a rare case according



Pilėnai by Jonas Mackonis-Mackevičius, 1982
(jonasmackonis.lt).

to the written sources) or suicide. The most famous case of the later happened at the Pilėnai Castle in 1336. The garrison led by Duke Margiris fought the Teutonic knights to the last, yet when the castle was overrun and the defeat became inevitable the last defenders of the castle killed their family members and committed suicide to avoid captivity.

Many wooden castles were burned by the enemies or by the Lithuanians themselves upon retreat. Nevertheless, the most important castles were rebuilt rather promptly. For instance, Veliuona (Junigeda) was burned in 1363 during the siege but in 1365 "men from the garrison of Veliuona" were mentioned again and two years later, in 1367, the Teutonic Knights launched new attack on Veliuona. Thus, this important front-line castle was rebuilt in no more than, probably, two years¹⁵⁵.

¹⁵⁰ Ibidem, p. 255.

¹⁵¹ VITKŪNAS M. Vilnius kovose su kryžiuočiais XIV a. antrojoje pusėje. *Karo archyvas*. Vilnius, 2011, t. XXVI, p. 33–34.

¹⁵² PETRAS DUSBURGIETIS *Prūsijos žemės kronika*. Vilnius, 1985, p. 225.

¹⁵³ Ibidem, p. 250.

¹⁵⁴ VYGANDAS MARBURGIETIS *Naujoji Prūsijos kronika*. Vilnius, 1999, p. 68–69.

¹⁵⁵ JANKAUSKAS V. Nemuno žemupio pilių gynybinės sistemos efektyvumas kovose su Vokiečių ordinu 1283–1369 metais. *Karo archyvas*, Vilnius, 2008, t. XXIII, p. 19.



Seredžius, 2nd Hillfort (Palocėliai, Lithuania) – a motte identified with the Dubysa Castle of the Teutonic Order. Photo by Manvydas Vitkūnas.

Along with castles of the national importance, there were castles controlled by individual nobles as well as small temporary refuges which served rural communities. The later were built at remote poorly fortified hillforts. One such refuge built amid the marshes at the Šukioniai Hillfort (Kėdainiai District, Lithuania) was researched by G. Zabiela in 1998, where 10 m² were excavated. The slopes of the hillfort are very low, only 2.5 m high. The top used to be circumvented with a wooden barrier. The Šukioniai Hillfort was probably used by the Semigallians, who fled to Lithuania after their lands were devastated and partly taken by the Teutonic knights of Livonia (the toponym of Šukioniai is widespread in the Semigallian territory). Šukioniai is identified with *Suckeyne* location mentioned in the chronicle by Herman of Wartberge devastated by the Teutonic knight during the raid of 1372. Many locations of alleged similar refuges are found in Samogitia, the part of Lithuania which suffered most of the attacks of the Teutonic Order from both Prussia and Livonia¹⁵⁶.

During the war with the Teutonic Order, a new type of fortifications previously known only in Western Europe appeared in Lithuania. It was the motte-and-bailey type castles. The motte-and-bailey type castle is considered to be a fortification consisting of a castle or a keep built on an artificial mound (the motte) and a fortified bailey. Castles of this type were widespread in the 10th–14th century. The motte-and-bailey type castles appeared in Lithuania in the 1st half of the 14th century. This was the result of the influence of the Teutonic Order. The hillforts of Dubičiai (Varėna District, Lithuania) and Vilkūnai (Kaunas District, Lithuania) were locations of the Lithuanian motte-and-bailey type castles. The Lithuanian mottes were rather small: up to 5 m high and up to 40 m in diameter at the basis¹⁵⁷.

One of the symbols of the Lithuanian statehood – the Upper Castle of Vilnius also known as the Gediminas' Castle – was also built on a hillfort. Along with the Lower Castle, the Curved Castle and

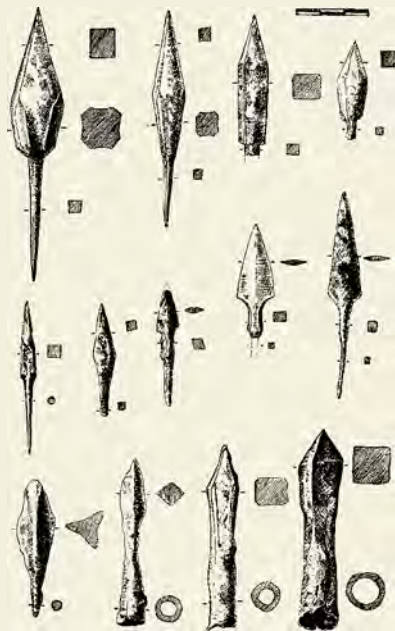
¹⁵⁶ ZABIELA G. Piliakalniai – slėptuvės. *Lietuvos archeologija*, Vilnius, 2001, t. 21. p. 399–412.

¹⁵⁷ ZABIELA G. Nuo medinės prie mūrinės pilies (motai Europoje ir Lietuvoje). *Lietuvos pilių archeologija*, Klaipėda, 2001, p. 11–41.

Crossbow and bow arrowheads from Gediminas' Hill excavations of 1940 (Vilnius, Lithuania) (Elena ir Vladimiras HOLUBOVIČIAI. Gedimino kalno Vilniuje 1940 metų kasinėjimų pranešimas. *Lietuvos praeitis*. Vilnius, Kaunas, 1941, T. I. Sąs. 2, p. 649–678).

Upper Castle of Vilnius on Gediminas' Hill (Lithuania).
Photo by Martynas Vidzbelis.

other fortifications, it formed the defensive complex of Vilnius during the period of the war against the Teutonic Order. The hillfort underwent a rather extensive archaeological research. The most extensive excavations (about 500 m²) were performed in 1938 by archaeologist Alina Kietlińska (1911–1974); unfortunately, the reports were lost during the WWII. In total, over 800 m² were excavated at the Gediminas' hillfort till nowadays and the research continues. The hillfort has revealed up to four m thick cultural layer. The first settlement was built there in the 1st millennium B.C. During the period of the war against the Teutonic Order, there was





Ukmergė Hillfort (Lithuania) used to host a wooden castle in the 14th–15th century. Photo by Martynas Vidzbelis.

a wooden castle on the top. Guillebert de Lannoy (1386–1462), a Flemish knight and traveller described his trip to Lithuania of 1413–1414 as follows: *“Afterwards, I came to Vilnius, the capital of Lithuania, where there is a castle built on a very high sandy hill reinforced with stones, soil, and brick-work. Inside, it’s all wooden. The courtyard of this castle goes down on two sides of the hill to the foot. There are many houses in that courtyard which is surrounded with a stone wall. In the castle and its yard, Duke Vytautas, the ruler of Lithuania, is often mentioned. He has his court and his headquarters there”*¹⁵⁸. Therefore, in the second decade of the 15th century, the castle on the Gediminas’ Hill was still wooden though it had some stone and masonry elements; the stone wall circumvented the Lower Castle. The Upper Castle

partly surviving till nowadays must have been built in the 15th century.

After the Battle of Grunwald of 1410, when the threat of the Teutonic Order was basically liquidated, most of the Lithuanian wooden castles destroyed in the late 14th – early 15th century were left abandoned; many others went into decay. True, written sources prove that some wooden castles (i.e., Veluona, Merkinė, Ukmergė, and others) were still used in 1430s–1450s¹⁵⁹. The latest hillforts also include defensive fortifications relevant to fortified military camps, i.e., Bakainiai (Kėdainai District, Lithuania) or Mažieji Žinėnai (Jonava District, Lithuania). This was how the history of the Baltic castles built at hillforts ended, yet the history of hillforts is still continuing.

¹⁵⁸ Kraštas ir žmonės. Vilnius, 1983, p. 49.

¹⁵⁹ ZABIELA G. The end of wooden fortifications in Lithuania. *Castella Maris Baltici II*, Nyköping, 1996, p. 223–228.

The Fate of Hillforts: from Manors to Festival Sites

The fates of the hillforts were very different. Some were forgotten and got lost in the forests. Others, on the contrary, remained on the open field and were ploughed. Agriculture devastated many early hillforts built on stand-alone hills with relatively low-pitched slopes. Eventually, many such hillforts lost their hillfort features and were levelled. Nowadays, some of the hillforts can be identified and distinguished from other hills only based on the features of the disturbed cultural layer appearing here and there.

At some hillforts, medieval wooden castles were replaced with masonry ones. Many such cases appear in the Baltic lands conquered by the Teutonic Order and the Livonian Order. In 1285, the conquerors built the masonry Rositten Castle instead of the wooden Latgalian one at the Rēzekne Hillfort in the eastern part of today's Latvia. In the southern Latvia, the masonry castle of Dobeles was built instead of the Semigallian one in 1335–1337 by the Livonian Order. Similar cases happened in the Prussian lands subdued by the Teutonic Order, too.

In the Grand Duchy of Lithuania, some masonry castles were also built at hillforts. Such was the case of the masonry Upper Castle of Vilnius built on the Castle or Gediminas' Hill, which was finished in the 15th century. Some hillforts were used as shrines. The Palanga Hillfort (Palanga Municipality, Lithuania) located on the shore of the Baltic Sea and better

known as the Birutė's Hill was researched by Vladas Žulkus in 1976 and 1983–1984 (in total, 263 m² were excavated). It was established that in the late 1st – early 2nd millennium A.D. the hillfort used to host a wooden Curonian castle. In the Middle Ages (in the 2nd half of the 14th century), the hillfort was supposedly turned into a shrine and observatory for monitoring celestial motions. There was an attempt to reconstruct it based on the post-holes discovered. The shrine existed only for several decades; later it was burned and deserted¹⁶⁰.

¹⁶⁰ ŽULKUS V. *Palangos viduramžių gyvenvietės. Acta historica universitatis Klaipėdensis*. Klaipėda, 1997, t. VII, p. 16–54.



Shrine-observatory of Birutė's Hill (Lithuania). Reconstruction by archaeologist Vladas Žulkus and architect Saulius Stripinis KLIMKA L., ŽULKUS V. *Lietuvos pajūrio žemės viduramžiais*. Vilnius, 1989, p. 75).



Livonian Dobeles Castle (Latvia) was built at a hillfort in the place of the former Semigallian Castle (ozolaivas.lv).

Mansions of some manors were built at hillforts since the 15th century. Such exceptional locations made them very secure; in some cases, the fortifications were supposedly enhanced. The Aukštadvaris Hillfort (Trakai District, Lithuania), which is one of the most impressive not only due to its outlook but also due to the richness of its cultural layer, was researched by V. Daugudis in 1957–1960. The total area of 958 m² was excavated and the cultural layer discovered spanned from the 1st millennium B.C. to the 17th century A.D. It was established that a wooden mansion was built at the location of the former Navinpilis castle. The mansion was built on top of the hillfort and that is how it got the name of Aukštadvario, which literally means “high mansion”. The town which developed nearby acquired the same name. During the excavations, the cultural layer dating to the 15th–17th century was discovered at the Aukštadvaris Hillfort¹⁶¹. Later the Aukštadvaris

Manor was moved to another location on the western outskirts of the town.

The Punia Hillfort (Alytus District, Lithuania) was thoroughly researched in 1958–1959 and 1961–1962 (by Regina Kulikauskienė), in 1974 (by Juozas Markelevičius), and in 2000 (by Vida Kiaugaitė). The total area of 1,282 m² was excavated and a 3.5 m thick cultural layer was discovered.¹⁶² In the 14th century, there was a wooden castle at the hillfort. In the early 15th century, it was a hunting castle of the Grand Duke Vytautas. Later, it transformed into a manor, which belonged to the Elders of Punia and was used till the 18th century.

After both the Prussian and the Livonian branch of the Teutonic Order were crashed at the battles of Grunwald and Pabaiskas, most of the territory of the Grand Duchy of Lithuania enjoyed the period of peace, which lasted for almost 70 years. In 1503, attacks of the Tartars and the Muscovites instigated construction of the Vilnius city defence wall.

¹⁶¹ DAUGUDIS V. Pilaitė, Aukštadvario piliakalnis. *Kultūros paminklų enciklopedija: Rytų Lietuva*, t. II, Vilnius, 1998, p. 15–16.

¹⁶² KULIKAUSKIENĖ R. *Punios piliakalnis*. Vilnius, 1974.

This date marked the beginning of the new stage in the Lithuanian fortification history. Old wooden castles were no longer answering the challenges of the artillery and fire arms epoch. Hillforts turned into expressive symbols of the old epoch, which was fading into oblivion.

Many hillforts have legends telling about churches that sunk into the ground or about secret underground tunnels. Latvian¹⁶³ and Lithuanian¹⁶⁴ folklore is especially rich with tales involving hillforts. Some of them were told to be graves of giants or it was said that they hosted spellbound armies that were to come out from the deep some day

and stand against the enemies; there was also a lore saying that, in the ancient times, hillforts were places where offerings to the gods were made. A reoccurring motive of the tales is that hillforts were mounded by soldiers – either by local or foreign (Swedish, French, Russian, or other armies). Some tales repeat, others are unique. For instance, in 1888, E. Volteris recorded a lore about the Migonys Hillfort (its excavations were described in the chapter about the hillforts of the Balts) telling that the dead had been cremated at the hillfort and that their ashes had been thrown into the river from which water had been drunken then; according to the lore, there used to be idols at the hillfort as well. Besides that, there is another much more widespread tale that the hillfort was mounded by the French soldiers in 1812 and that they hid their

¹⁶³ URTĀNS J., PĪGOZNE I., TREIJA R., VĪTOLA I. *Kalnā bija stalta pils. Latvijas pilskalni un to teikas*. Rīga, 2008.

¹⁶⁴ KERBELYTĖ B. *Lietuvių liaudies padavimai*. Vilnius, 1970; *Istoriniai padavimai*. Chicago, 1949.

Lepelionys Hillfort was named “Napoleon’s Hat” (Lithuania). Photo by Martynas Vidzbelis.





Jurgaičiai Hillfort – the Hill of Crosses (Lithuania) – in the early 20th century. Photo by Ludwik Krzywicki. Vytautas the Great War Museum in Kaunas.



Jurgaičiai Hillfort – the Hill of Crosses (Lithuania) – has become an important venue of the Christian pilgrimage. Photo by Manvydas Vitkūnas.

treasures there¹⁶⁵. There is a lot of the tales in which hillforts are raised as by miracle or some supernatural powers.

At least part of the hillforts was used as shrines of the old religion and even later some of them maintained their sacral role¹⁶⁶. Even after conversion to Christianity, hillforts served as venues for various local community meetings, festivities and

rituals (often syncretised, uniting elements of both the Christian and the old Baltic faith). Till nowadays, the St. John's Eve (Rasos in Lithuania, Ligo svētki in Latvia) are often celebrated at hillforts.

On some of the hillforts, churches and chapels were built and/or cemeteries were established. Crosses were also built at hillforts up till the 20th century, which proves their exclusive sacral role. The Jurgaičiai Hillfort (Šiauliai District, Lithuania) better known as the Hill of Crosses is one of outstanding cases. The hillforts dating to the 1st millennium – 14th century was built on a stand-alone hill on the bank of the Kulpė River. There was a settlement at its foot and the 9th–12th century cemetery nearby. The Jurgaičiai Hillfort has been identified as a location of the Kuliai Castle mentioned in 1348¹⁶⁷. Crosses have been built on the hillfort since the middle of the 19th century. This was related with the rebellions against the Russian Empire, which took place in Lithuania in 1830–1831 and 1863–1864. Eventually, the hillfort turned into a famous site of pilgrimage and people started building crosses there to earn the holy blessing. Masses and other festivities were organized there. During the period of the Soviet occupation, there were several attempts to destroy the Hill of Crosses: The crosses were cleared with bulldozers; even plans to dam the river and flood the access to the hill were made. Nevertheless, people continued building crosses. As for the present, their exact number is not known but it is assumed to be over 100 thousand. On September 3, 1993, the Hill of Crosses was visited by Pope John Paul II (1978–2005), who prayed and chanted the Mass at a chapel built at the foot of the hill for this occasion. Now, the Hill of Crosses is a venue of Christian pilgrimage known world-wide.

The concept of hillforts as a certain historical heritage began to develop, when those old witnesses of the past came into the focus of researchers with some historical knowledge. When history

¹⁶⁵ KURILA L.; VAITKEVIČIUS V. Mirusiųjų deginimo papročio refleksijos: padavimas apie Migonijų piliakalnį. *Tautosakos darbai*, Vilnius, 2011, t. 41, p. 107–134.

¹⁶⁶ URTĀNS J. Arheoloģija un folklorā. Latvijas svētvietas un pilskalni. *Latvijas Zinātņu akadēmijas Vēstis*. A daļa. Sociālās un humanitārās zinātnes, Rīga, 2012, 66 sējums, 5/6 numurs, p. 19–25; VAITKEVIČIUS V. *Alkai. Baltų šventviečių studija*. Vilnius, 2003, p. 48–50.

¹⁶⁷ *Lietuvos piliakalniai: atlasas*. Vilnius, 2005, t. II, p. 436–439.

fans, writers, publicists, and other public intellectuals started visiting hillforts and describing them in their works, they turned into subjects of a broader scientific interest and research, instead of being just local sites of attraction surrounded with different tales. The public interest in history grew as well. The overall progress of this science was obvious. Moreover, the spirit of romanticism urged to turn to the past, search for roots, and show interest in historic monuments.

The romanticised picture of hillforts began to acquire realistic details, when the archaeological research began and the understanding of the purpose of hillforts, their construction, and buildings therein became better. In the 19th century, the hillfort research was still very amateurish, yet they became more professional by the brink of the centuries. In the 1st half of the 20th century, many researchers already reached such a level of archaeological knowledge and skills that they could apply proper excavation methods and publish the finds.

In the 2nd half of the 19th century and the early 20th century, during the period of the national rebirth in Lithuania and Latvia, hillforts were not only subjects of historical interest but also symbols of the search for the national roots, freedom fights, and endurance. Mostly through the press, public intellectuals and activists, publicists and history fans formed a generalised image of hillforts as monumental symbols of the national history and freedom fights. Out of local sites of interest, hillforts developed into the sites of collective historical memory. As the scientific understanding of hillforts improved and the number of archaeological expeditions increased, the public interest in hillforts grew as well. Actions were taken to promote listing, protection, and management of hillforts and other historical monuments. During the interwar period, it became popular to plant trees on hillforts in Lithuania. True, it was a rather damaging initiative for the hillfort legacy as the cultural layer was disturbed and, eventually, hillforts were covered with



Ruins of the medieval castle and the park at the Rēzekne Hillfort (Latvia) in the early 20th century (rezekne.today.lv).

greenery and stopped being a distinctive landscape feature. Nevertheless, this was a good-intended attempt to protect hillforts and make them more beautiful.

During the interwar period, both in Lithuania and Latvia hillforts turned into venues of public gatherings. All kinds of civil and paramilitary, youth and student and history lovers' organisations were taking care of hillforts. The most famous hillforts were visited by excursions. Historical-ideological construct of public (especially youth) patriotic motivation was developed and hillforts were at its core. They were started to be seen as an important legacy of the ancestors, which could serve not only as a subject of interest but also as a source of strength and empowerment for the generations to come. Hillforts were granted attention not only in general education programmes but also in the framework of patriotism development in the Lithuanian and Latvian armies.¹⁶⁸ Evidently, for both the Lithuanians and the Latvians hillforts represent exclusive items of the national legacy.

During the period of the Soviet occupation, hillforts were no longer seen as an exceptional group of archaeological monuments – at least from the point

¹⁶⁸ VITKŪNAS M. Kovos Lietuvos istorinėje atmintyje: piliakalniai kaip „atminties vieta“. *Karo archyvas*. Vilnius, 2016, t. XXXI, p. 274–327.



Dovainony Hillfort (Lithuania) being washed off by the Kaunas Reservoir. Photo by Zenonas Baubonis.

of view of the state institutions. Attempts were made to diminish their social significance so that hillforts could no longer serve as venues for manifesting national and patriotic aspirations. There was no more such massive care of the hillforts as during the period of the interwar independence; hillfort protection and maintenance was regulated in accordance with general rules for the protection of cultural heritage objects.

The Soviet ideologist were consistently developing the construct implying that *"the age-long fights of the Lithuanians and the Latvians against the Germans"* and *"the cooperation between the brotherly Lithuanian, Latvian, and Russian nations against the German aggression"* began in the Middle Ages and seamlessly continued during the WWII. The second Soviet occupation of Latvia and Lithuania, which began in 1944–1945, was presented as the liberation of the Nazi oppression and the Third Reich was called the continuator of the policy to the German knights that tried to conquer the Easter Baltic in the Middle Ages. Such stories can be found in the Soviet history, and the ultimate manifestation of such ideology was a monument to the Soviet Army built in 1977 by the Žuvinkai Hillfort (better known as the Salduvė Hill, Šiauliai, Lithuania), which was presented as a *"monument*

for the fights which took place in the land of Šiauliai in 1236–1945." The monument correlated the medieval fights between the Balts and the Livonian Sword-Brothers (the Battle of Soule) with the Soviet Army fights against the Nazi. A figure of an ancient Baltic warrior armed with a sword placed next to two Soviet soldiers was very uncharacteristic for monumental ensembles of such type. In the process of the monument construction, the cultural layer at the foot of the hillfort, which had already been in a bad condition, was ravaged and partly destroyed; so was the rampart circumventing the hillfort. In 1993, the monument was deconstructed.

Although during the Soviet occupation period, many ideological and administrative restrictions were applied and people were threatened with all kinds of repressions, hillforts in Lithuania and Latvia continued to be a beloved venue for gatherings of patriots maintaining national traditions and semi-legal festivities. Hillforts were visited by tourists and enthusiasts of local history clubs. However, even such peaceful national identity promotion initiatives faced restrictions and their initiators were persecuted.

By the end of the Soviet occupation period, attention to hillforts that were perceived as venues manifesting national and freedom aspirations increased immensely both in Lithuania and Latvia. In the late 1980s, national flags proudly waved over hillforts during numerous patriotic gatherings.

During the Soviet period most of the hillforts were treated as listed objects of the national heritage with a varying degree of success. Dozens of hillforts were destroyed by opening quarries or by building dams and hydroelectric power stations, especially on the bigger rivers like the Daugava or the Neman. After Lithuania regained independence, a monument to the hillforts washed off by the Kaunas Reservoir was built at the foot of the Vieškūnai Hillfort (Kaunas, Lithuania).

After the Lithuanian and Latvian independence was restored, the issue of hillfort preservation received a lot of attention. Hillforts represent a large

and frequently visited group of cultural legacy monuments. Some hillforts have turned into venues of experimental (or live) archaeology festivals and other events aimed at maintaining and raising historical awareness. Famous and massively attended historical and archaeological festivals take place at both Lithuanian hillforts (Kernavė, Apuolė, Alytus, Varnupiai, etc.) and Latvian ones (Limbaži, Mežotne, etc.). The same can be said about other countries: In Poland, a lot of attention is paid to the Prussian and the Yotvingian cultural legacy; people interested in the Baltic heritage and its archaeological reconstruction exist in Belarus and Kaliningrad Oblast of the Russian Federation, too.

National holidays are also celebrated at hillforts or near them. For instance, in Lithuania, on the 6th of July – the State Day and Coronation of Lithuanian King Mindaugas – people gather at hillforts to sing the national anthem. Festivities of the Baltic Unity Day celebrated in both Lithuania and Latvia on the 22nd of September in the memory of the victory of the Battle of Soule of 1236 are often organized at hillforts, too.

The Baltic hillforts have been presented in an abundant scientific literature as well as popular publications and photo-albums. Artists like to paint them, too. Medieval historical fiction reads depicting events in the Balts' territory also tend to exploit plots involving wooden castles standing one or another hillfort.

The idea of reconstructing some wooden castle in order to present the Baltic historical legacy for the public and the tourist is very appealing. It is unquestionable that reconstruction of a specific castle demands a lot of scientific information to be acquired during archaeological excavations. In Lithuania, such initiative has been raised in Anykščiai, where the best-researched Šeimyniškeliai Hillfort is located¹⁶⁹. A bridge, two towers and a section of defensive wall have already been built. The site is



Semigallian wooden castle reconstruction at Tērvete (Latvia) (tervetesnovads.lv).

often visited by tourists and, hopefully, it will promote a better understanding of the role of hillforts in the defence of the country and history as a whole.

In Latvia, several wooden castles in Tērvete and Lielvarde have been built not on hillforts but at new locations nearby. These reconstructions have also been based on the data derived from archaeological research more or less. They receive a lot of visitors, too.

Hillforts were built many centuries ago; in the 19th – early 20th century activists of the Lithuanian and Latvian national rebirth turned them into important venues of the national identity and historical awareness raising and all that makes them an important feature of the national identity for the Baltic nations. Hillforts located outside the present Lithuania and Latvia in the former Baltic lands also remind that once these territories were inhabited by people of the Baltic descent. The millennium-long history of the Baltic hillfort continues.

¹⁶⁹ BARANAUSKAS T. *Anykščių medinė pilis*. Anykščiai, 2005; BARANAUSKAS T.; ZABIELA G. *Vorutos pilis*. Vilnius, 2001.

Conclusion

In the historical habitat of the Balts stretching from the Baltic Sea in the west to the upper reaches of the Oka in the east, there were about four thousand Baltic hillforts attributable to different periods. It is hard to make an exact estimate, because the level of archaeological research as well as hillfort identification and accounting standards vary from country to country. The scientific studies of the Baltic hillforts began in the 19th century and the 2nd half of the 20th century was the period of their most intensive research. Relatively, hillforts of the western Baltic tribes – especially those of the Yotvingians and the Curonians – are researched the best.

Most of the hillforts were built on convenient natural hills (hill-type hillforts) or capes (cape-type hillforts). There are hillforts of other types, too, i.e., lowland or marshland type hillforts. Artificially mounded hillforts are rare. Usually, the tops of the Baltic hillforts covered less than half a hectare, while hillforts with the top area exceeding one hectare are an exclusive rarity in the Baltic lands. Hillforts served as fortified settlements, temporary refuges, or wooden castles. In the Middle Ages, masonry castles were built at some hillforts, too. Hillforts-shrines are researched the least.

The earliest hillforts appeared on the Baltic lands on the brink of the 2nd and the 1st millennium B.C. The habitat of the Brushed Pottery Culture (the present Eastern Lithuania, South-eastern Latvia, and North-western Belarus) is the area of the most intensive proliferation of the early hillforts. The reasons for the fortification appearance in this region remain unclear; however, hillfort development was certainly stimulated by the trade routes of the Bronze Age – especially those involving the Daugava River. The hillforts of the 1st millennium B.C. were fortified settlements. Shortage of metals and remoteness of the region in regard to migration routes conserved the material culture of its inhabitants relying exclusively on old technologies and local resources for many ages.

In the most eastern habitat of the Dnieper Balts, hillforts were typical to all the Baltic cultures. For some cultures (i.e., Yukhnove), hillforts make a major part (up to 95 percent) of the archaeological monuments that are known today and are attributable to the culture. Due to the landscape specifics, habitats of some cultures (i.e., Milagrad) are dominated by the marshland (lowland) type hillforts and not by hill-type or cape-type ones like in other areas of the overall Baltic habitat. Archaeological excavations of the hillforts of the Dnieper Balts have revealed relatively many alleged shrines. In the middle of the 1st – early 2nd millennium A.D., the eastern part of the Baltic habitat was overtaken by the Slavs. By the 12th century, only the Baltic islands in the habitat of the Eastern Galindians (the basin of the upper reaches of the Oka) survived.

Since the development of individual Baltic tribes, certain differences in the hillfort construction and use can be noticed as well. Those differences were caused by varying degree of development of the individual tribes as well as specific geographical situation and landscape. As hillforts of some of the tribes are still poorly researched, we can outline only certain features. The overall development of the tribal fortifications was closely related to external threats (in regard to the Curonian, Semigallian, Latgalian, Prussian, and Yotvingian hillforts). In the late 1st – early 2nd millennium A.D., tribal hillforts turned into the territorial defence centres.

The Lithuanian state which emerged in the 13th century included most of the Baltic tribes. However, due to a rapid conquest of the Livonian Sword-Brothers and the Teutonic Order on the eastern Baltic coast, the Prussian, Scalvian, Nadruvian, Latgalian, Curonian, Semigallian, and Selonian lands were subdued, and the development of the local fortifications therein was discontinued. Wooden castles built at hillforts of the Baltic tribes played an important role in the fight against the invaders. Later, some of the former tribal hillforts were used for

building masonry castles of the Order or bishops. In the western part of the Grand Duchy of Lithuania, wooden castles built at hillforts in the 13th – early 15th century made the major share in the total number of castles. Many of them, combined with masonry castles, formed unified defensive lines of the state, for instance, the Neman defensive line which stretched from its upper reaches to Samogitia.

The end of the war against the Teutonic Order and a rapid proliferation of fire arms caused a decay of many wooden castles built at hillforts. Some of the hillforts were turned into manor centres; churches and chapels and cemeteries were established at the others. Individual hillforts turned into important pilgrimage venues, for instance, the Jurgaičiai Hillfort better known as the Hill of Crosses. Still, most of the hillforts were swallowed by forest or turned into arable fields or pastures.

Hillforts represent important and usually outstanding landmarks. In Lithuania and Latvia, they have been beloved venues of local festivities and gatherings since ancient times. They have been

stimulating human imagination, too. Both Lithuanian and Latvian folklore has many tales and stories about hillforts. The emergence of hillforts was often attributed to the doings of magical forces (i.e., giants) or foreign armies. In the 2nd half of the 19th – the 1st half of the 20th century, as the amount of professional hillfort studies and relevant scientific publications increased, a fact-based understanding of hillfort emergence and importance began to develop.

Hillforts are not only important archaeological monuments witnessing daily life and fights of the past, yet also historical and cultural memory symbols, awareness of which has been raised by different means since the late 19th century. Hillforts draw interest of Lithuanian and Latvian national rebirth activists, writers, and artists. Hillforts as witnesses of historical fights and spiritual strengths of the ancestors have been included into ideological constructs promoting patriotism. In the 21st century, the Baltic hillforts remain an important layer of historical, cultural, and spiritual legacy, and their preservation and research process continues.

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